

Association for Information Systems AIS Electronic Library (AISeL)

AMCIS 1998 Proceedings

Americas Conference on Information Systems
(AMCIS)

December 1998

The Redesign of a Reengineering Class

Ellen Hoadley
Loyola College in Maryland

Suzanne Ricklin
T. Rowe Price Investment Services Inc.

Follow this and additional works at: <http://aisel.aisnet.org/amcis1998>

Recommended Citation

Hoadley, Ellen and Ricklin, Suzanne, "The Redesign of a Reengineering Class" (1998). *AMCIS 1998 Proceedings*. 381.
<http://aisel.aisnet.org/amcis1998/381>

This material is brought to you by the Americas Conference on Information Systems (AMCIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in AMCIS 1998 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

The Redesign of a Reengineering Class

Ellen D. Hoadley

Sellinger School of Business and Management
Loyola College in Maryland

Suzanne Ricklin

T. Rowe Price Investment Services, Inc.
Retail Training and Quality

Abstract

This paper reports on a redesign of an MBA Process Reengineering course from the traditional 16-week format to a weekend format. A survey was conducted to compare student learning of the educational objectives in the two formats. In addition, observations from both students and the instructor are discussed. The paper recommends such a format for additional intensive course opportunities.

Introduction

The MBA program at Loyola College includes approximately 1000 part-time students who work in the mid-Atlantic region. In 1993, the curriculum was revised to address the current business environment's emphasis on cross-functional process management. The operations course was revised to include Business Process Reengineering with a strong focus on Information Technology. The driving force behind this phenomenon in the business community has been customer demand for flexibility of products and services while businesses require a core process that delivers that flexibility and takes full advantage of mass production opportunities within that process. This concept has been named *mass customization* (Pine, 1993).

Why Redesign?

The concepts of reengineering have been well received by student and business stakeholders. However, the course only had been offered in the traditional semester weekly session format. Students challenged that we should put the concepts we were teaching into practice. So a redesign effort was undertaken to meet the expressed needs of the MBA graduate student population. "Shorter course semesters" and "Condense class time frames" are frequent requests coming in from our graduate MBA school students. Our ultimate goal became redesigning an existing class structure without compromising the learning experience. In order to meet the assessed needs successfully, we needed to answer a couple of questions:

1. Which MBA class contained content that would lend itself to a new condensed format (from 16 weeks to 3 weekends)?
2. What process would we use to develop the structure of the course?
3. How would we evaluate the successes and future challenges of our efforts?

In order to move forward with this process we answered the questions with the following responses:

1. Operating Processes and Technologies in the Information Age turned out to be a prime candidate to reconfigure. What better way to test the whole re-engineering concept than to redesign a reengineering course?
2. We decided to use an Instructional Systems Design (ISD) approach to modify the course. This systematic process would allow us to focus on what we wanted the students to be able to know and do at the completion of the course
3. A survey of the stated objectives was completed by participants who just completed the traditional 16 week model as well as the participants of the experimental 3 weekend class as a way of assessing the learning that took place and as an opportunity to compare and contrast the traditional model with the experimental course.

The Redesign Process

We used a modified ISD process which included the five phases known as the ADDIE model (Analysis, Design, Development, Implementation, Evaluation) (1997). This process similar to the Systems Development Life Cycle from basic systems analysis and design texts (Kendall, 1992; Whitten & Bentley, 1998) and is characterized by specific common processes that guide the development of knowledge and skills. We felt it was important to take a performance-based approach to the redesign. Our process focused on the key objectives of the course while integrating an adult learning methodology to encourage the learning to take place in the new proposed time frame. The commitment to ensure the learner is able to successfully complete tasks identified up-front is possible through an approach that is learner-centered and hands-on, with the opportunity for practice, feedback, and interaction.

First, in the analysis phase we clarified the goals and objectives of the course we were re-designing. Using the 15 objectives currently defined for this course, we went one step further and identified 8 of the 15 objectives that we felt were crucial to the

learning process outlined for this course (these objectives are highlighted in the chart on the following pages). Second, during the design phase we worked on the structure and sequence of topics, individual learning tasks, hands-on activities, and presentations as we were moving from one 2 ½ hour class per week for 16 weeks to 12 hours per weekend for 3 weekends. This design was crucial because if mistakes were made here, there was no time to recover. Third, the development phase involved preparing materials, creating the survey, and making sure we incorporated adult learning methodology as well as various learning style preferences into the course work.

To provide various ways for the student to grasp the material, lectures, traditional text, interactive group work (mixing groups up throughout the classes so they learned to work with many of their classmates), case analysis, class discussions, physical movement, food and candy and a very important touch of humor. One of the most important elements of the design included an in-class activity flow diagramming exercise with live subject matter experts to assist the students in mapping an “as is” process and a “to be” process (a key learning objective). This activity spanned a 7-hour elapsed time from 1-4 p.m. Saturday through 9-1 p.m. Sunday and replaced the final project in the traditional semester format. Fourth, the implementation phase is where we actually carried out the class over 3 weekends. The fifth and final step involved the evaluation phase in which we surveyed the students who participated in the experimental class and find out what worked well as well as areas for improvement.

Survey Results of this Experimental Design

As you can see from the following chart, the students clearly felt learning took place in both the traditional class as well as the experimental class. There is evidence to suggest that students felt they had a better grasp of the learning objectives in the redesigned class. Students reported that in the intensive session “the information blended together because of the short time span- it made it easier to understand the inter-relationships of the course objectives. Also, the format allowed for more group exercises which is beneficial.” As with any new process, there are areas to improve. In addition, we must take into account the Hawthorne effect of this group of students who knew they were participating in an experiment

There were additional unintended consequences for the instructor. Other than one student missing a Sunday session for his parents’ 50th anniversary, the course had 100% attendance for 40 students. This improved the learning opportunity. The in-class redesign project allowed students to visualize in a confined space and time what an organization has to go through to accomplish a similar redesign. Groups of subprocess redesigners sent emissaries to develop the macro process. Groups were concerned that their inputs and outputs meshed with prior and subsequent subprocesses. The visualization was of controlled mayhem that simulated the stress of the organizational experience. It was important to debrief this activity thoroughly to crystallize the similarities between this experience and what their organizations would go through. Finally, we had underestimated the stamina required for an instructor to handle an intensive course. During the process redesign activities when the instructor was a resource, groups requested assistance, which required the instructor to walk up and down the banked steps of the classroom for seven hours. We decided that this format needs to include a caveat to the instructor – get in shape if you need to!

Where Do We Go from Here?

This experiment in redesigning an MBA class should encourage all of us to continually look at different ways of doing “what we have always done.” As we are faced with one constant, change, we know that yesterday’s solutions may not be enough to solve today’s problems and meet future challenges. Our goal is to provide students with additional tools and resources to succeed in today’s business world. We can succeed in leading by example- challenging the existing structure of how a class needs to be structured in order for learning to take place. This experiment gave us one opportunity to lead the way.

References

- Kendall, Penny A. *Introduction to Systems Analysis and Design: A Structured Approach*, Wm. C. Brown Publishers, Dubuque, IA, 1992, pp. 17-36.
- “High Performance Training Manuals.” Instructional Systems Development. Info-line. ASTD. July 1997, Issue 9707.
- Pine, B. Joseph II. *Mass Customization: The New Frontier in Business Competition*, Harvard Business School Press, Boston, MA, 1993.
- Whitten, Jeffrey L., and Bentley, Lonnie D. *Systems Analysis and Design Methods (4th edition)*, Irwin/McGraw-Hill, Boston, MA, 1998, pp. 72-103.

Learning Objective At the completion of this class I am able to	Mean Score* 16 week class** N = 18	Mean Score* 3 weekends*** N = 39
1. Identify and discuss current literature on and driving forces toward process management and innovation	3.94	4.46
2. Discuss the evolution of business from customization through mass production to mass production and the impact of that evolution	4.17	4.46
3. Identify key processes in an organization	4.50	4.87
4. Compare and contrast the application of continuous improvement and reengineering of business processes in an organization	4.11	4.49
5. Identify Critical Success Factors for an organization	4.28	4.74
6. Identify and select processes that are candidates for reengineering	4.56	4.77
7. Solicit customer needs and translate those needs into specific process requirements	4.44	4.72
8. Diagram the flow of activities in the key processes of an organization	4.44	4.85
9. Analyze an activity flow diagram to determine its alignment with its information technology requirements	3.83	4.62
10. Redesign a business process using information technology to align the process with the capture, storage, retrieval, and distribution of its information	4.00	4.38
11. Identify the critical sponsors of the process both at the executive and working levels	4.17	4.26
12. Identify appropriate members of a process management team	4.11	4.38
13. Identify and discuss components of an organizational culture that enhance or inhibit resistance to innovation	3.94	4.59
14. Identify key performance indicators of a process	4.17	4.87
15. Construct an implementation plan for the redesign of a business process	4.22	4.36

* Scale: 5 = strongly agree, 4 = agree, 3 = neither agree or disagree, 2 = disagree, 1 = strongly disagree

** = class from 9/97 to 12/97

*** = class from 1/98 to 2/98