

Mgmt 799: “Management through Simulations”

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INTRODUCTION: One of the challenging aspects of an MBA education is that students are taught various techniques in each function and what determines success in that function but not how to manage trade-offs among different goals or the different techniques for doing so. This is especially true in management, particularly so in the context of the workforce. It is possible, for example, to organize tasks and work schedules in ways that should maximize efficiency, yet we know that pursuing those objectives hard can lead in practice to high levels of stress and alienation among workers that causes performance suffers. We can motivate employees powerfully with financial incentives, but we rarely know in advance how far to push those incentives before they are no longer cost-effective.

The purpose of this class is to understand those trade-offs and to give a practical sense as to when they matter in terms of overall firm or organizational performance. The way we propose to do this is through computer-based simulations. The simulations give participants options and then show them the consequences of their decisions for overall firm performance. In contrast to other pedagogy, the goal of these simulations is not to show us the best systems. It is to show how the choices among practices matter.

Simulations that can present realistic contexts and illustrate management choices effectively are complex and expensive. A novel feature of this proposed course is to borrow such simulations rather than to construct them ourselves. Large corporations build such simulations to train their own employees, and we have secured permission from those companies to use their simulations in the class. The design of the class features a different simulation with a different focus each week for the six weeks of the course.

The simulations also have the added benefit of giving students some feel for what is involved in running the kind of operations that they would otherwise never see, such as the operating staff in a nuclear control room or, at the other end of the spectrum, running a McDonalds restaurant, where efficiency and quality can easily be undermined by a single problem employee. Each simulation focuses on a different aspect of management.

We begin the course with some readings about simulations and the logic behind them. Then every week we have readings about the management issue under consideration that week (e.g., what we know about virtual teams).

COURSE REQUIREMENTS: The simulations will each take 3-4 hours to do. We will use some class time to get them started –typically on a Thursday – and plan on debriefing them the following Tuesday. Some of the simulations will be done in teams and some done individually, based on the requirements of each. Assessments for the course will be based on class participation (20%), performance in each simulation (30%) , and write-ups describing lessons learned (50%). We also expect that the company that provided each case will help join in the debriefing of each simulation, providing an opportunity to ask questions about the real context of their operations.

Classes meet Tuesday and Thursday at 1:30PM from March 12th to April 18th Thursday.

COURSE OUTLINE:

Before the first class, please read:

Clark Aldrich. 2009. Chapter 1, *Understanding Highly Interactive Virtual Environments* and Chapter 4, *Highly Interactive Content from the Student and Instructor's Perspective*. From *Learning Online from Games, Simulations, and Virtual Worlds*.

Session 1: Front-line Management: Operating a McDonald's store. The simulation highlights the issues associated with difficult employees.

Readings: Ray Kroc. *Grinding it Out: The Making of McDonalds*. Chapter 1.

Robert R. Love and James M. Hoey. *Management Science Improves Fast-Food Operations, Interfaces*.

Session 2: Managing High Reliability Systems: Institute for Nuclear Power Operations. How should we deal with emergencies?

Reading: Karl Weick. 1987. *Organizational Culture as a Source of high Reliability*. California Management Review.

Session 3: Conducting Talent Reviews: Johnsons Controls Part I. How Do We Ensure that the Right People Get into Leadership Positions?

Reading: Chris Ashton, Lynne Morton, (2005) "Managing talent for competitive advantage: Taking a systemic approach to talent management", Strategic Human Resources Review.

Session 4: Managing in a Virtual Environment. Regis Learning Case. How to manage a global team.

Reading: Guido Hertel et al. 2005. *Managing virtual teams: A review of current empirical research*. Human Resource Management Review.

Session 5: Prioritizing Objectives. Johnson Controls Simulation Part II. Executives typically have many goals and opportunities for action. Which ones come first?

Reading: Kenneth Boyer and Marianne Lewis. 2002. *Competitive Priorities: Investigating the Need for Trade-offs in Operations Strategy*. Production and Operations Management.

Session 6: Running a Global Shoe Company. Mercury Shoes. The challenges of operating in different countries.

Reading: Barbara Smit. 2008. *Sneaker Wars: The Enemy Brothers Who Founded Adidas and Puma and the Family Feud that Forever Changed the Business of Sports*. Chapters 1 and 2.