



# Simulation #2: Disruptive Innovation

4/9/2023

75 Possible Points

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4/3/2023 to 4/9/2023

## ▼ Details

### Simulation Analysis #2

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MGT 5804

**Assignment Overview:** The objective of this assignment is to provide an opportunity for you to apply the conceptual content and critical skills we are covering in the class to develop and test the effectiveness of a set of strategic decisions to manage the dual transformation problem in a dynamic, simulated environment. Understanding how to manage the trade-offs these investments require in dynamic environments where the rate of change in product diffusion is nonlinear and changes rapidly is at the heart the strategic questions you will address in this simulation.

### Assignment Objectives:

- Analyze strategic problems of managing disruptive innovations in complex environments
- Develop and implement emergent strategies to address the identified dual transformation strategic problems
- Evaluate the effectiveness of formulated and implemented strategies and identify key areas of improvement

### Instructions:

- You will work on this assignment individually and will complete your decisions before the assignment due date.
- Unfortunately, no late submissions can be accepted so please make sure you have completed your work before the assigned deadline.
- You will be able to access the game through our class coursepack at HBSP
- The main challenge is to manage your R&D investment based on your sales forecasts. You will manually enter sales estimates, and the sales estimate will generate the projected revenue, with 3% of that value the maximum available for R&D spending. You will be fired if you have a significantly negative sales variance in one year or a consistently negative sales variance for three years in a row. You will also be fired for large negative operating profits.

- It is very important to watch several key indicators of Back Bay's performance. The sales variance reporting usually indicates whether the firm's pricing strategy is in line with the market. Holding pricing too high or for too long in the hopes of milking additional profits is a risky strategy. In the commodity AGM business where substitution by competitive products can happen overnight, it is critically important for Back Bay to keep its volumes up and sell enough product to earn a strong contribution margin. Missing a sales forecast repeatedly will cause the room for maneuver to shrink rapidly—the company will not have enough money to fund R&D. This ties back to the notion of keeping the core business healthy as long as possible while investing in the new.
  - Keep the core business healthy as long as possible, keep a close watch on pricing and sales, keep taking cost out so that you keep up with industry price conditions and have the flexibility to drop the price, recognize when you are going into decline and be ready for that.
  - Start investing in the new disruptive technology when the core business is still healthy. Recognize that it will take some time to show results: one or two measurement periods are not enough.
  - Improving a product attribute, whether it is performance or cost, requires sustained investment over multiyear periods.
  - Focus on what data is important and what is not. A manager must make tough decisions and cannot invest in everything.
  - You will be able to play the game up to 30 times for this first run. I will reset the game for another 30 runs on Thursday during office hours for a total of 60 runs for the week.

### Grading Rubric:

- You will be graded based on your overall performance in the game
- **Grading scale:**
  - 75-72 -- Not Fired + Successful transition to New Disruptive Technology
  - 72-67 -- Not Fired + Not successful in transitioning to New Disruptive Technology but effective management of sustaining innovation
  - 66-63 -- Fired + Growth with New Disruptive Technology
  - 60-62 -- Fired + Not successful in transitioning to New Disruptive Technology but effective management of sustaining innovation
- Variation in Scores within each range will be determined based on overall financial performance (e.g., top financial performance measured by 1 standard deviation above average scores compared to the class = higher scores in each interval; weaker financial performance measured by 1 standard deviation below average scores compared to the class = lower scores in each interval)