**SYS 660**

**Extra-Credit Project**

**Spring 2019**

**Distribute on May 2, 2019**

**Due on April 2, 2019**

**Overview:** This project is intended to showcase the skills you have learned in the course to date.

**Deliverable**: A well-written and formatted **pdf report** (it should read like a single document, not a series of questions and their answers), no more than 10 pages in length, discussing your analysis of the case below. Keep in mind this a report you are generating to help your client with decision making. You may use software tools to make cash flow diagrams, sensitivity analysis, etc. Please **only** submit printouts (pdf/screenshots) of your models, including items like cell formulas for spreadsheets or other model assumptions as needed and **only** if they add value to the report.

This is an open ended assignment. There is no right or wrong answer. Instead you will be evaluated by the quality of your analysis. Quality of your analysis will not be clear to me unless you communicate and write coherently and thoroughly. Ensure that you justify your assumptions. This is an individual, take-home exam. You may use any generally available research sources such as news articles and journal papers, but you may not discuss the exam with your peers.

Grading criteria (equally weighted):

* Completeness of analysis
* Coherency of analysis
* Correct application of decision analysis tools
* Justification of decision model and assumptions
* Clarity of exposition

**SYS 660 Managing Director April 30, 2019**

**Policy Analysis, Inc.**

**1 Castle Point**

**Hoboken, NJ 07030**

**RE: Marriott’s new home-rental business**

Dear SYS 660 Managing Director:

Marriott International[[1]](#footnote-1) is gearing up to start a new home-rental business with the goal of competing with Airbnb[[2]](#footnote-2) and other home-sharing companies, The Wall Street Journal reports.[[3]](#footnote-3)

Your task for this project is to provide **a thorough decision making and risk analysis** report on Marriott’s decision announced in April 2019.

Your analysis should be quantitative. Your report should be reproducible. You are asked to provide recommendations related to this decision and a risk mitigation plan based on your quantitative analysis.

Specifically, you would need to have a response for the following:

* Why it would make sense for Marriott to do this? (support your answer swith decision making tools that we have introduced through the course. E.g. Expected value and NPV analysis, utility function, etc.)
* What types of risks is Marriott incurring by opening up its platform to the home-rental business? (support your answers with quantifiable methods)
* What types of risk is Airbnb incurring by Marriott’s decision? Quantify these risks and their impact on Airbnb.
* How does this decision impact the economy of the hotel industry as well as the society at large? (support your answers quantitatively)

Marriott is a public company and all its financial documents are publicly available[[4]](#footnote-4). Airbnb is not a public company yet ,therefore you would need to do some research to find values useful for your analysis.

Assume discount rate of 5% throughout your analysis.

We look forward to reading your report and recommendations based on your analyses.

Sincerely,

Yeganeh M. Hayeri

1. <https://www.marriott.com/default.mi> [↑](#footnote-ref-1)
2. [https://www.airbnb.com](https://www.airbnb.com/) [↑](#footnote-ref-2)
3. <https://www.cnbc.com/2019/04/29/marriott-to-launch-home-rental-platform-to-compete-with-airbnb-report.html> [↑](#footnote-ref-3)
4. <https://marriott.gcs-web.com/annual> [↑](#footnote-ref-4)