Elizabeth Earl

DSC630-T301

Week2: Project Proposal—Milestone 2

**Introduction**

* Background

In August of 2021 Disney introduced a new ticketing scheme to the Disneyland Resort in response to their new reservation system in place due to Coronavirus restrictions. Their reservation system works by selecting a date in which you want to visit and reserving such date to ensure your entry in line with capacity limits. The new ticketing scheme introduced by Disney is known as Magic Key Pass which replaced their old Annual Pass program; the Magic Key Pass consists of four keys: Dream Key, Believe Key, Enchant Key, and Imagine Key. The Dream Key pass was priced at $1399 (highest of all keys) and promised “Reservation-based admission to one or both theme parks every day of the year” but was soon met with criticism when Dream Key holders were unable to make reservations to visit the park.

* Problem Statement

When purchasing expensive Dream Key passes, die-hard Disneyland fans were under the impression they would be let into Disneyland/California Adventure every day of the year. They were highly disappointed when they found out they were unable to do so due to lack of reservations available to either park. Many blamed not being able to reserve a date on Disney’s lack of preparation and over-selling/promoting a program they were not able to accommodate. Could upset magic key holders be avoided if Disney had used predictive analysis to determine how to promote their new ticketing scheme in a way that everyone (key holders and day ticket purchasers) would benefit from it?

* Scope

August 25, 2021, marked the date the keys went on sale and I will use that as a basis of when to start the data search. After said date I will consider dates when certain key levels were completely sold out. These dates will help me create a basis of when I want the data I find to cover. I am focusing on consumer’s reactions to the scheme which will be based on both reviews/complains as well as Disney’s profit/loss due to the Magic Key program.

I will focus on Disney company as a whole but, in terms of individual theme park ticket sales my focus is strictly on California locations: Disneyland and Disney California Adventure. All four Magic Key Pass types will be considered as well as the various one-day tickets available as well as multiday.

The one-day ticket scheme is as follows, with each ticket having its own set of restrictions:

Seasonal:

* 1-Day peak
* 1-Day Regular
* 1-Day Value

Tier:

* 1-Day tier 6
* 1-Day tier 5
* 1-Day tier 4
* 1-Day tier 3
* 1-Day tier 2
* 1-Day tier 1

\*\*For the purpose of the project the detailed restrictions will not have impact on the results of any findings. \*\*

* Document Overview

I will rely on Disney’s global revenue data found:

[Disney - statistics & facts | Statista](https://www.statista.com/topics/1824/disney/#dossierKeyfigures) -- this will help create an overall image on how Disney’s revenue/income changed during Disneyland specific ticket changes were being implemented.

**Preliminary Requirement**

* Technical Approach

I do not plan for any other Disney park’s data to be included/crucial to my research. But will be included if they come back with finding that are unusual or in line with California’s Disney’s findings.

Disneyland/Disney California adventure research: findings from this data should be in line with dates from August 2021 and beyond as well as including information on consumer’s responses.

* Data sources or plan for data

As mentioned in the document overview, I will be using Disney’s Revenue data as source to discover my findings. Other datasets I will be looking into will include those specific to Disneyland/Disney California Adventure. The data sources should span at the earliest August 25, 2021, to only include information when Magic Key Program was implemented. Regarding consumer feedback I will use data on how the public overall reacted to the new program. When the program went on sale versus when the keys were sold out will be crucial in the public’s opinion and whether the change was drastically positive or negative.

* Analysis

Analysis will be based on Magic Key Pass holder’s reaction to sold out passes. The analysis must include how overselling the Magic Key impacted sales in other departments. Could this disapproval in Magic Key holders have been avoided using predictive analysis? and how could predictive analysis continue to help as conditions with Magic Key passes currently stand? These questions will help guide analysis required throughout the project.

* Requirement Development

With this project I will assume Disney did not use any predictive analysis nor did they purposely over their Magic Key passes to then upsell their daily tickets. But I will consider how much their daily tickets sales might have increased/decreased with the addition of the Magic Key program. Inclusively I will consider tactics such as e-mailing Disney content subscribers target emails to join the Magic Key program and their impact on Magic Key pass sales.

* Model Deployment

The project will be deployed using a programming language model. In order to conduct the project, the datasets will be ran using Python and/or R to gather correct information. Datasets must be in CSV format to clean data and correctly use crucial information.

* Testing and Evaluation

As mentioned above, testing will be conducted using programming languages, specifically Python and R, with each language complimenting each other where one fails to provide adequate information. After testing the findings will show a positive/negative impact that the Magic Key Pass program on Disney’s individual ticket sales thus impacting their overall revenue. Sales as well as overall consumer’s opinions will have a correlation to answer the question on whether Disney could have used predictive analysis to avoid a negative impact (if any) on sales of tickets.

**Expected Results**

I expect using predictive analysis would cause in increase in overall ticket sales, regardless of the purchase being made as individual/multi day or key passes. Because there seems to have been a consensus of overall disappointment due to lack of ticket availability to Magic Key Pass holders, I am expecting predictive analysis could have avoided such disapproval.

**Execution and Management of Project**

* Project Plan

Initially I will only use overall data on Disney’s revenue; this will provide a basic overview of how Magic Key Passes impacted the Disney Company. After I will add information on ticket sales exclusive to Disneyland and Disney California Adventure. Additionally, I will use consumer’s responses to the program to determine how the ticketing scheme impacted ticket sales. If needed I will expand my research to other Disney parks and potentially Disney stores on their profit/loss due to the Magic Key program.

* Project Risk

Abuse of consumer information/data while using predictive analysis can cause a risk. Data often belongs to the consumer and there is a thin line on whether a company (Disney) is taking advantage of this consumer data for gain.