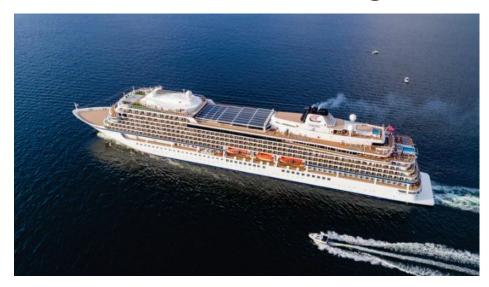# CIMA

Mica Cruise business game

Background

Mica Cruise is a quoted company that operates a fleet of holiday cruise ships.

During the 1970s, the holiday industry went through a major upheaval, with a significant increase in the availability of charter airlines that enabled holiday companies to offer "package holidays", combining flights and hotel accommodation in popular holiday resorts.

Many smaller cruise lines found it difficult to compete against the package holiday providers and were forced to close. Mica Cruise's revenues were not too seriously affected by this change because it had always aimed at the more luxurious end of the market.

It had a loyal customer base who continued to buy cruises and who were not particularly interested in cheap package holidays.

Mica Cruise is now one of the World's six largest cruise companies, when measured in terms of passenger capacity.

It presently owns 15 large and modern ocean liners, which makes it significantly smaller than its largest rivals, who operate 30 to 110 ships, but it is the largest cruise line in its region, both in terms of number of ships and passenger capacity.

Mica Cruise's business model

Passengers are generally attracted by the company's reputation for offering a high-quality service. Mica Cruise has a reputation for offering excellent food and entertainment, in comparison to its most immediate rivals, although its cruises are also more expensive.

It pays close attention to passenger feedback and aims to achieve as much repeat business as possible. The company has many customers who have taken six or more cruises in the past ten years. The average age of Mica Cruise's passengers is 47.
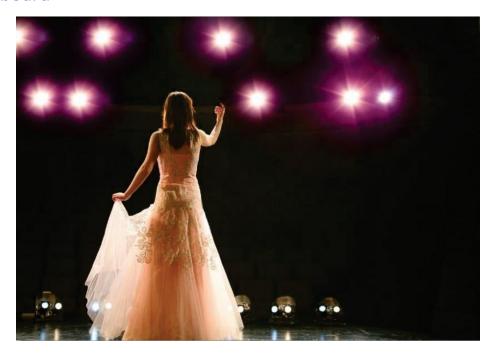
Mica Cruise's ships visit a total of 160 ports of call in the course of a year. Most ships follow circular routes that include between 8 and 14 ports of call in the course of a two-week cycle. Generally, two of those ports are designated as points of embarkation and disembarkation.

Passengers wishing a fourteen-night cruise will join their ship at one of those ports and will disembark when the ship returns there, two weeks later.

Those who wish a seven-night cruise will join their ship at one of the ports and will leave at another. The embarkation ports are all conveniently close to airports.

Passengers fly from their local airports to their embarkation port. They are collected by bus or taxi and either driven to their ship or taken to a hotel to await their ship's arrival.

Life on board

Most of Mica Cruise's passengers aim to spend a relaxing time while cruising, making full use of the leisure facilities aboard ship.

Most passengers enjoy researching and preparing for shore visits and they spend time both above and below decks.

All ships have swimming pools, with deck chairs and sunbeds so that passengers can enjoy the fresh air and sunshine.

The ships' theatres host shows, performances and other events. Cruiseline often pays celebrities, such as authors or artists, to present daytime talks about their work.

Cruise passengers often regard mealtimes as major highlights of the day.

Proposal to track passengers using RFID

The Marketing Director have been investigating the potential of radio-frequency identification (RFID) tags to gather data about passenger behaviour aboard ship.

Each passenger will be fitted with a bracelet when they board their ship at the start of their cruise. Each bracelet will carry a unique electronic code that can be read whenever the bracelet is in range of an RFID reader.

We will fit RFID readers across the ship. These will identify and record passenger movements, so that we have a detailed picture of where every passenger spends time while aboard the ship and the use that each passenger makes of the facilities on board.

This new data will create the opportunity for a revolutionary change in the way that we engage with our passengers, thereby enhancing their experiences aboard ship.

For example, we will know which passengers are attending shows in the ship's theatre and whether they are returning to watch subsequent shows.

We might use this information to send targeted messages to encourage passengers to attend future performances that match their tastes, based on shows they have seen already, or to encourage passengers who have not yet been to the theatre to try a forthcoming show.

Tracking passenger movements will also help us to streamline services. For example, housekeeping staff can be informed when passenger cabins are empty, so that they can be cleaned while the passengers are having a meal or relaxing by the pool. Catering staff can be warned that passengers have left their cabins and are walking towards the restaurant for breakfast

This system will also monitor the use made of shore visits. RFID readers by the ships' gangways will track the time spent ashore by individual passengers. We know that some passengers choose to stay aboard during some stops, but this will give us a more detailed understanding of their behaviour.

RFID tags are secure and, so, they can also be used to make payments while aboard. Passengers can pay into a personal shipboard account when they book their cruise or, using their credit card, while they are aboard.

They can then use their RFID bracelets to authorise payments by holding them close to low-powered units at the point of sale for, say, shore excursions or restaurant upgrades.

List of passenger data sources for potential use in Big Data analytics

Six months have passed....

Mica Cruise fitted RFID readers to enable it to track passenger movements aboard its ships. The system became fully operational three months ago and the following is the list of data sources.

List 1: Booking

All outstanding bookings, showing dates, ship and port of embarkation. This file also shows the cabin type chosen by the passenger, the dining option and details of any prebooked shore excursions that are selected at the time of booking.

Payment dates are also recorded. Passengers are asked to pay a 10%, non-returnable deposit at the time of booking. Any outstanding balance must be paid at least seven days before the departure date.

Passengers are identified by their email addresses, which gives each passenger a unique reference.

List 2: RFID data

All passenger movements are tracked using RFID bracelets. The system also tracks the time spent ashore during shore visits.

These bracelets are also used to identify passengers at the point of sale, whenever they buy anything aboard ship. That includes payments ranging from shore excursions to small items from the ship's shop.

List 3: Booking history

Booking records are archived after the cruises have been completed. They remain accessible, so that they can be used to organise promotional emails and other sales materials, that can be used to encourage passengers to make further bookings.

List 4: Customer satisfaction surveys

All passengers are invited to complete an on-line survey at the conclusion of their cruise. This comprises 120 statements, such as "Mica Cruise cruises offer excellent value for money". Each statement requires a response on a five-point scale that varies from "disagree strongly" to "agree strongly"

Links to the questionnaire are distributed by email and responses automatically record the passengers' email addresses. Response rates are typically 30%.

Requirements

1) Explain how collecting RFID data on passenger movements will enable us to plan and control costs more effectively.

 2) Evaluate the concern expressed by several of Mica Cruise's hotel services managers that pushing this "revolutionary change" is simply because the technology exists and this technology will do nothing to improve passengers' experiences.

 3) What are the potential advantages and disadvantages of using these data sources and Big Data analytics to build a model that could identify relationships between the information we have captured and revenues?

  4) Evaluate the potential value of Mica Cruise's passenger data as a source of competitive advantage.