**Business Case:**

**Cases:**

In today's business case, a customer flight reservation system often contains a centralized use case:

1). Customers book flights through mobile apps or phone calls to airlines. Sometimes too much flight information can lead to an error in flight booking.

2). In peak season, there will be a large number of customers using the network system to book flights at the same time, which will lead to the server being crowded and unable to respond to the booked behavior of the skeleton, and eventually the system will crash and be unable to continue working.

3). Some of the larger airlines allow customers to book breakfast, lunch and dinner, but they have a lack of realistic descriptions and the options are not rich enough (online ordering is far less varied than what is actually available).

**Analysis of cases:**

Firstly, case 1 shows that the existing system's information window interface is not clean enough information classification and statistics are not perfect. Therefore, the flight service system in our project needs to improve this point to make the display and appearance of flight information more concise, so that customers can easily distinguish the information they need. This is conducive to improve the work efficiency of the system and save the customer's time.

Secondly, case 2 illustrates that the existing system often suffers from server overload, which leads to the failure of flight booking activities and increases server maintenance costs. Therefore, the design of the system should consider reducing the load of the server and reasonably planning the busy season booking process, so that the system can be more humane to customers in the busy season.

Thirdly, case 3 shows that many flight systems are not perfect in the additional service side, including the reservation service of food and drink. Usually, the system has too little selectivity, and the service personnel on the plane cannot meet the needs of customers in all aspects.Therefore, in our project, the system should be more user-friendly in terms of food and drink service, so as to improve service efficiency and reduce the burden on service personnel.

Overall, our system mainly focuses on the following three parts:

1. Improve the existing information system.

2. Add or optimize servers.

3. More reasonable UI design.

**Benefits and Costs:**

1. **Benefits:**

If such a flight reservation system is successfully designed, it will greatly reduce manpower input and improve work efficiency, mainly reflected in the following aspects:

1). With the improvement of the information system, customers can accurately choose the flights they need, so they do not need to cancel and reschedule for many times, which not only improves the work efficiency of the system but also reduces the workload of the staff.

2). Due to the improvement of server quality, customers can also book flights normally in peak season, which not only greatly reduces the unnecessary trouble for customers (because the system is broken down and they can't arrange their own schedule normally), but also reduces the maintenance cost of the server, so that the airline company can avoid unnecessary losses.

3). Reasonable UI design is conducive to customers to complete the reservation of all required services before boarding the plane, which not only saves customers' time, but also reduces the manpower input on service personnel.

**2. Costs:**

From the overall system point of view, to improve the information system and server quality and improve the UI design will cause a lot of costs. Because information system upgrades and server upgrades are expensive, a good UI design is also valuable. But in the long run, the system will increase productivity and save a lot of money (labor, maintenance), so the cost is quite acceptable compared to the benefits it brings.