Mini-Case: Journey to Mars

With your team, discuss your approach to the following case. How will you start your research?

SpaceX is known for their goals to create a colony on Mars, in part through offering space tourism. They recently crossed a critical juncture when their Falcon 9 rocket, working with NASA, successfully launched while returning a booster rocket to their launchpad to be reused. Reusable rockets such as this will cut the launch costs by a factor of 100, giving SpaceX a competitive advantage in delivering supplies to the International Space Station.

SpaceX hopes to dispatch its first astronauts to Mars in 2024 with landing projected for 2025. However, considering the amount of material needed to be shipped to Mars (water, food, oxygen, equipment for building, as well as people), NASA has pegged the overall expenditures for going to Mars at $100 billion over 30 to 40 years.

SpaceX and NASA, working together, may be able to accomplish this. However, the government agency can only project funding of $25b for the project over the next 25 years, and that funding is subject to political whims.

Currently, SpaceX is planning to offer space tourism treks at $250,000 a flight. Seats on a flight to Mars would cost $500,000 or more. Looking at this challenge, do you think these are the right prices SpaceX should charge for a ticket? Some things you might want to consider are: the size of the market and the length of the voyage to Mars (about 7 months).

What would you recommend SpaceX to charge tor their initial space tourism flights and for their Mars flights in the future, and how would you recommend they proceed with selling tickets for these experiences, given that they have not yet launched a human into space?