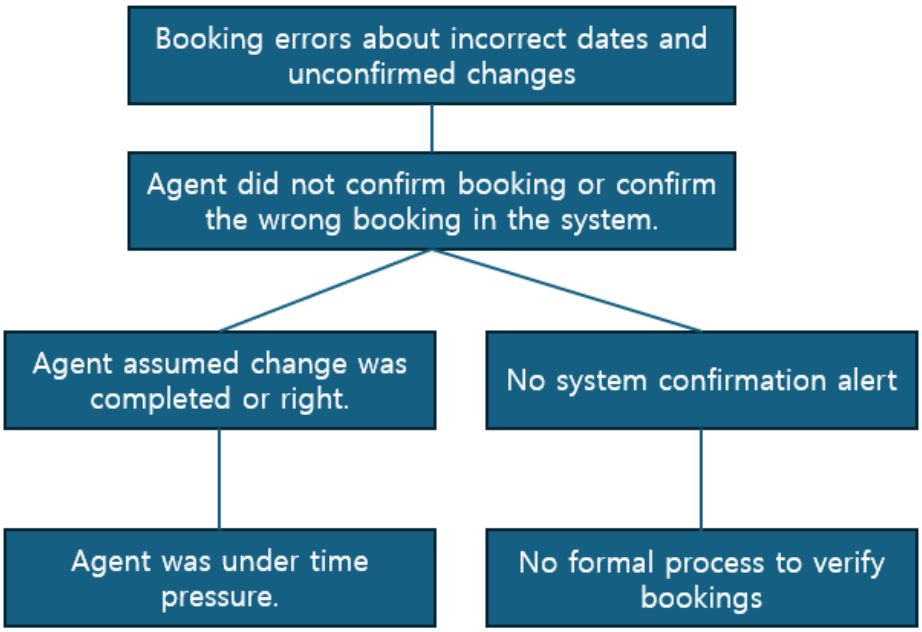
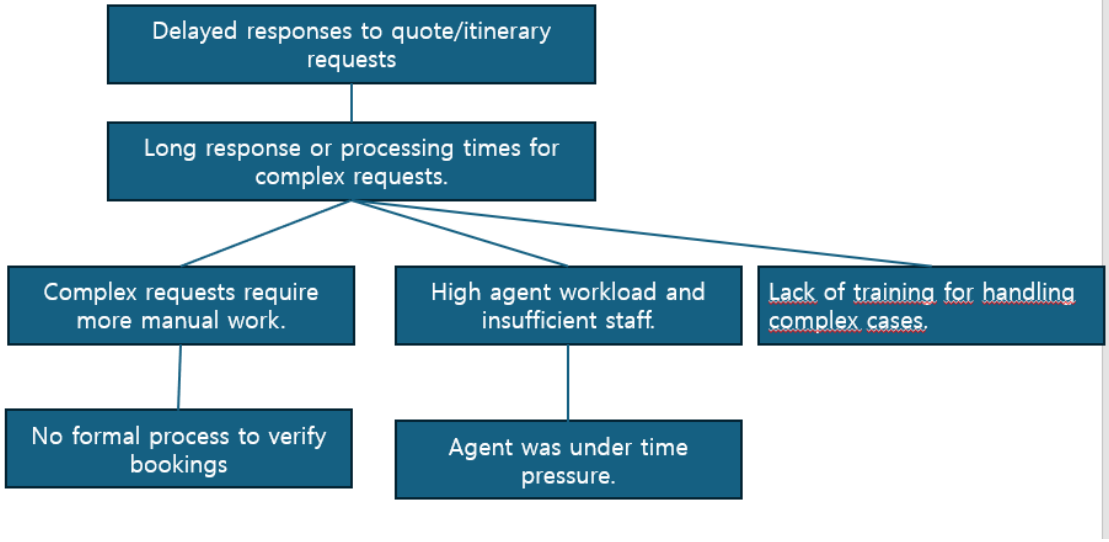
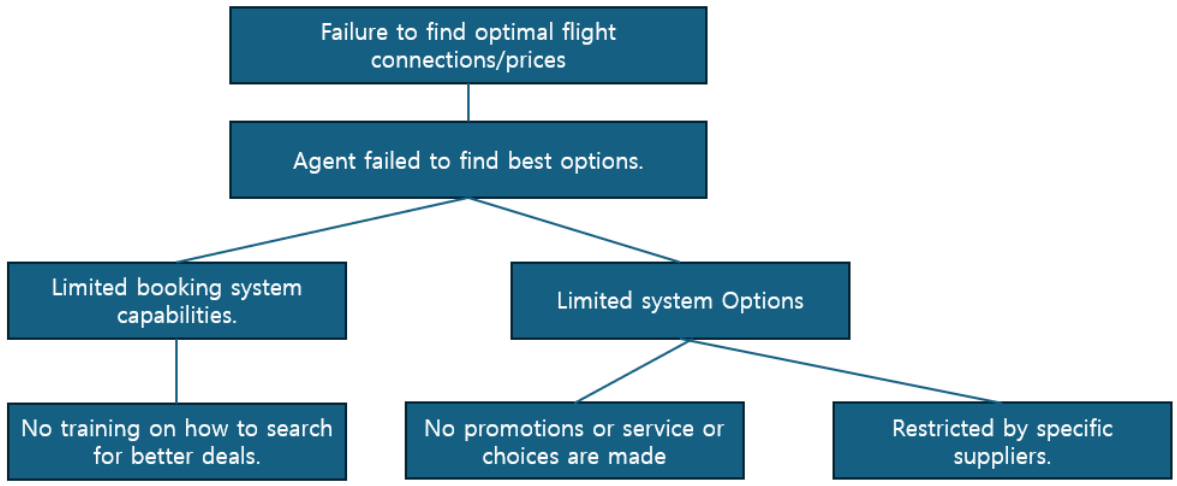
1. A)

Name	Explanation	Data/Hypotheses	Qualitative Impact	Quantitative Impact
Booking errors about incorrect dates and unconfirmed changes	Travel agents fail to confirm bookings in the system, resulting in incorrect dates or unconfirmed modifications.	50 bookings per day, About 2% of bookings have errors. Gross profit per booking = $100.	Severe customer dissatisfaction, risk of losing large corporate clients, and significant customer inconvenience.	0.02 × 50 × $100 = $100 per day = $36,500
Delayed responses to quote/itinerary requests	Delays occur, particularly for complex requests, with some taking up to 2 days to respond	100 itinerary requests per day. About 10% of requests take up to 2 days. Gross profit per booking = $100.	Reduced customer satisfaction, especially for high-value corporate clients, and potential loss to competitors offering faster service.	0.1 × 100 × $100 = $1,000 per day = $365,000
Failure to find optimal flight connections/prices	Travel agents fail to provide the best flight options, leading customers to find better deals online.	50 bookings per day. About 5% of bookings are not competitive. Gross profit per booking = $100.	Loss of customer trust, reduced value of travel agency services, and increased likelihood of customers booking independently.	0.05 × 50 × $100 = $250 per day = $91,250

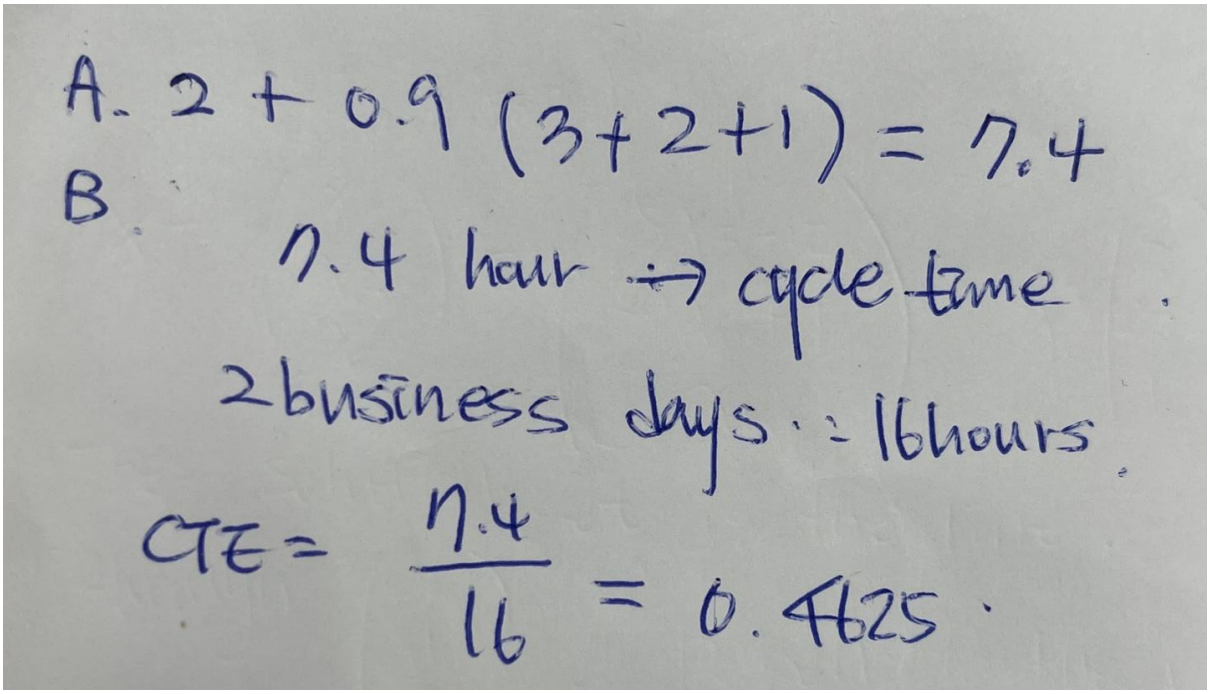
B)


Booking errors about incorrect dates and unconfirmed changes
Agent did not confirm booking or confirm the wrong booking in the system.
Agent assumed change was completed or right.
No system confirmation alert
Agent was under time pressure.
No formal process to verify bookings

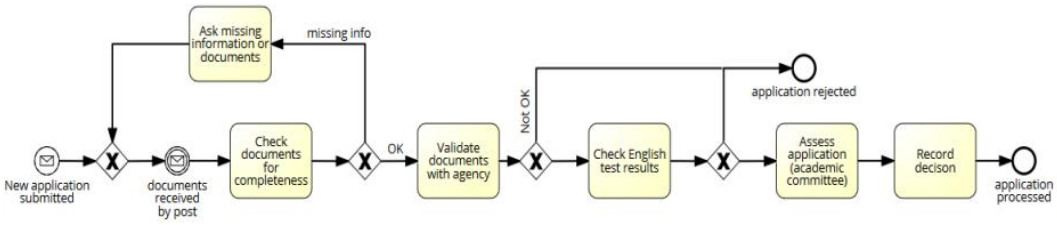

Delayed responses to quote/itinerary requests
Long response or processing times for complex requests.
Complex requests require more manual work.
High agent workload and insufficient staff.
Lack of training for handling complex cases.
No formal process to verify bookings
Agent was under time pressure.


Failure to find optimal flight connections/prices
Agent failed to find best options.
Limited booking system capabilities.
Limited system Options
No training on how to search for better deals.
No promotions or service or choices are made
Restricted by specific suppliers.

2.


A. 2 + 0.9 (3+2+1) = 7.4
B.
7.4 hour → cycle time
2 business days = 16hours
CTE = 7.4 / 16 = 0.4625.

3.


Ask missing information or documents
missing info
application rejected
Not OK
New application submitted
documents received by post
Check documents for completeness
OK
Validate documents with agency
Check English test results
Assess application (academic committee)
Record decison
application processed

2week 10min 80% 10min 90% 10min 90% 2weeks 2days

2weeks + 10min + (2weeks+10min)/0.8 + 10min + 0.9(10min + 0.9(2weeks + 2days))

10min = 1/6 hour

2weeks = 336

$$336 + (1 \div 6) + ((1 \div 6) + 336) \div 0.8 + (1 \div 6) + 0.9 \times ((1 \div 6) + 0.9 \times (336 + 48))$$

345.766666666666666666666666667 hour