23102009 Parkshinhyung

Assignment 3 – Process Analysis

1. Consider the following summary of issues reported in a travel agency.

A.

Name	Explanation	Hypotheses/data	Qualitative Impact	Qualitative Impact
Booking errors	Customers report booking error(incorrect flight dates or unconfirmed booking)	2% of 50 bookings per day have booking errors.	Disrupted travel plans, loss of customer trust, and customer inconvenience.	0.02 × 50 × $100 = $100/day
Delayed Responses to Quotes	Delays in responding to complex requests for itineraries. In some cases, responses take up to 2 days.	10% of 100 requests per day are complex and delayed for up to 2 days.	Customers perceive poor service quality, leading to frustration and potential loss of business.	0.1 × 100 × 1 day= $1000/day
Failure to Find Best Options	Travel agents fail to secure the best flight connections and prices, leading customers to find better options themselves online.	5% of customers report finding better deals on their own.	Customers perceive a lack of value in the service, potentially leading them to book independently.	0.05 × 50 × $100 = $250/day

B. I used "Cause-effect diagram"

1. Machine

- Lack of integration between flight reservation systems
- Inefficient software or poor User Interface (UI) design

2. Method

- Unclear assignment of responsibilities for handling customer requests
- Insufficient communication and confirmation of customer requests

3.Material

- Incorrect or outdated information used in bookings (e.g., booking the wrong dates)

4.Man (People)

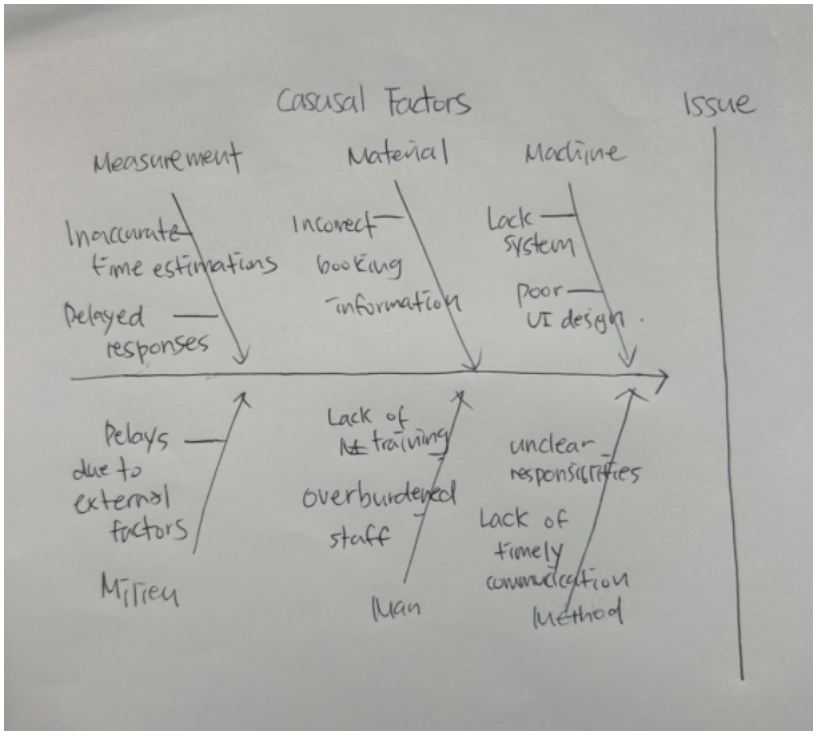
- Lack of training for travel agents and low motivation
- Overburdened staff leading to mistakes and delays

5.Measurement

- Inaccurate estimation of response times for customer requests
- Delays in providing quotes and itinerary responses

6.Milieu

- Delays caused by external factors, such as slow responses from airlines or other external entities



2. Consider the following process model. Each task is annotated with its mean

processing time.

Assess project profitability: 2 hours

Prepare production plan: 3 hours (since 90% of requests are accepted)

Estimate material costs: 2 hours

Estimate labor costs: 2 hours (additional task from production manager)

Prepare and submit quote: 1 hour

Total theoretical cycle time:

2 hours+3 hours+2 hours+2 hours+1 hour=10 hours

B. Cycle time efficiency = Theoretical cycle time/ Cycle time = 10h/16h = 00.62

Therefore, the cycle time efficiency is 62.5%.

#3. Calculate the theoretical cycle time of the Admission process, assuming the following. Total Theoretical Cycle Time:

Document arrival: 14 days

Completeness check: 0.007 days

Sending to academic agency: 14 days + 0.007 days

English test check: 1 day + 0.007 days

Committee decision: 14 days + 0.042 days

Record decision: 2 days + 0.0014 days

Total cycle time=14+0.007+14+0.007+1+0.007+14+0.042+2+0.0014=45.0644 days

Thus, the theoretical cycle time is 45.06 days.