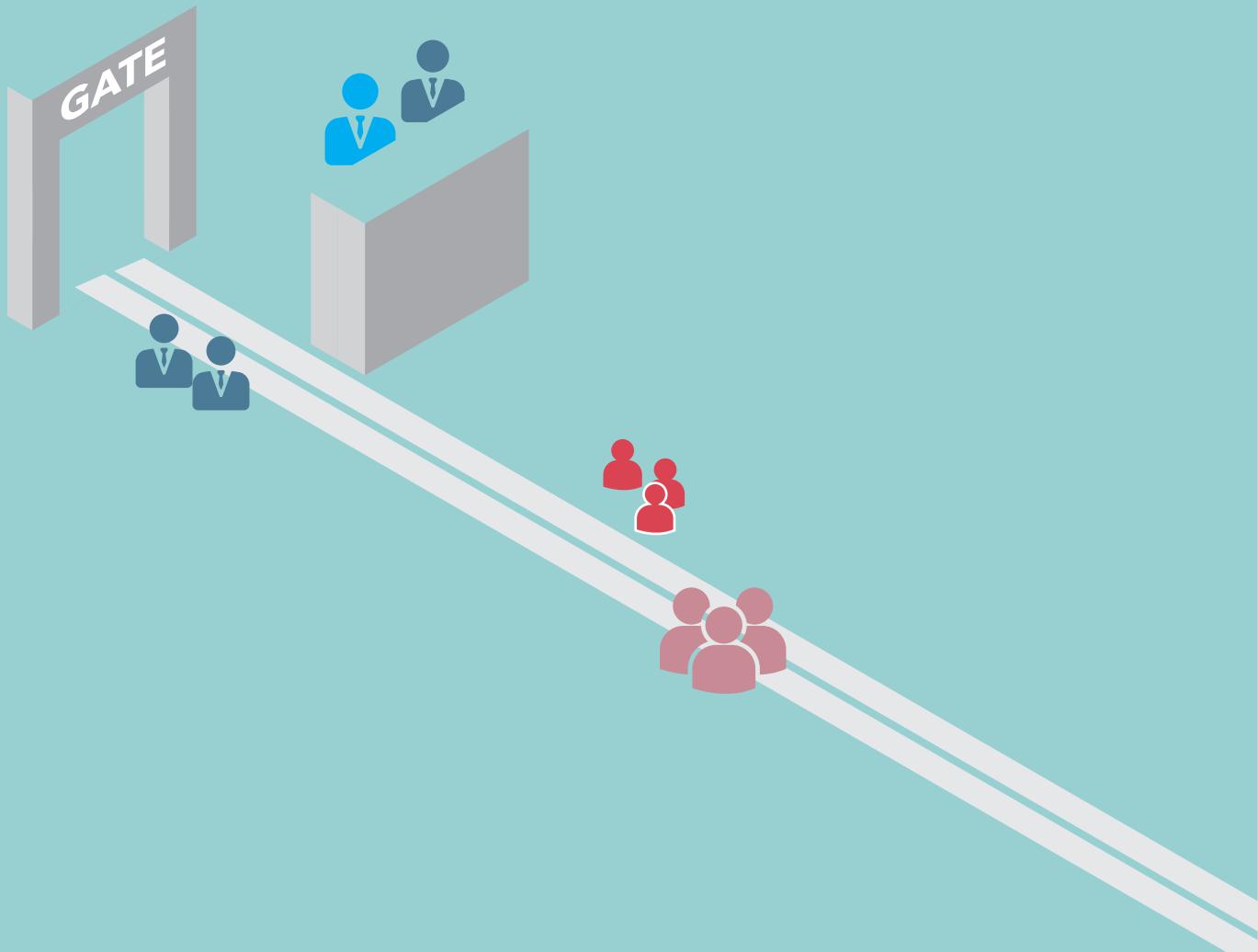


Boarding in the future

Design a roadmap and a digital product for the future boarding process

Appendices



**Master Graduation Thesis
by Qiong Wang**

Msc Design for Interaction
Industrial Design Engineering
Delft University of Technology

Appendices

- A. Project brief
- B. Stakeholder map
- C. Service blueprint
- D. Problems recap
- E. Questionnaire for final test

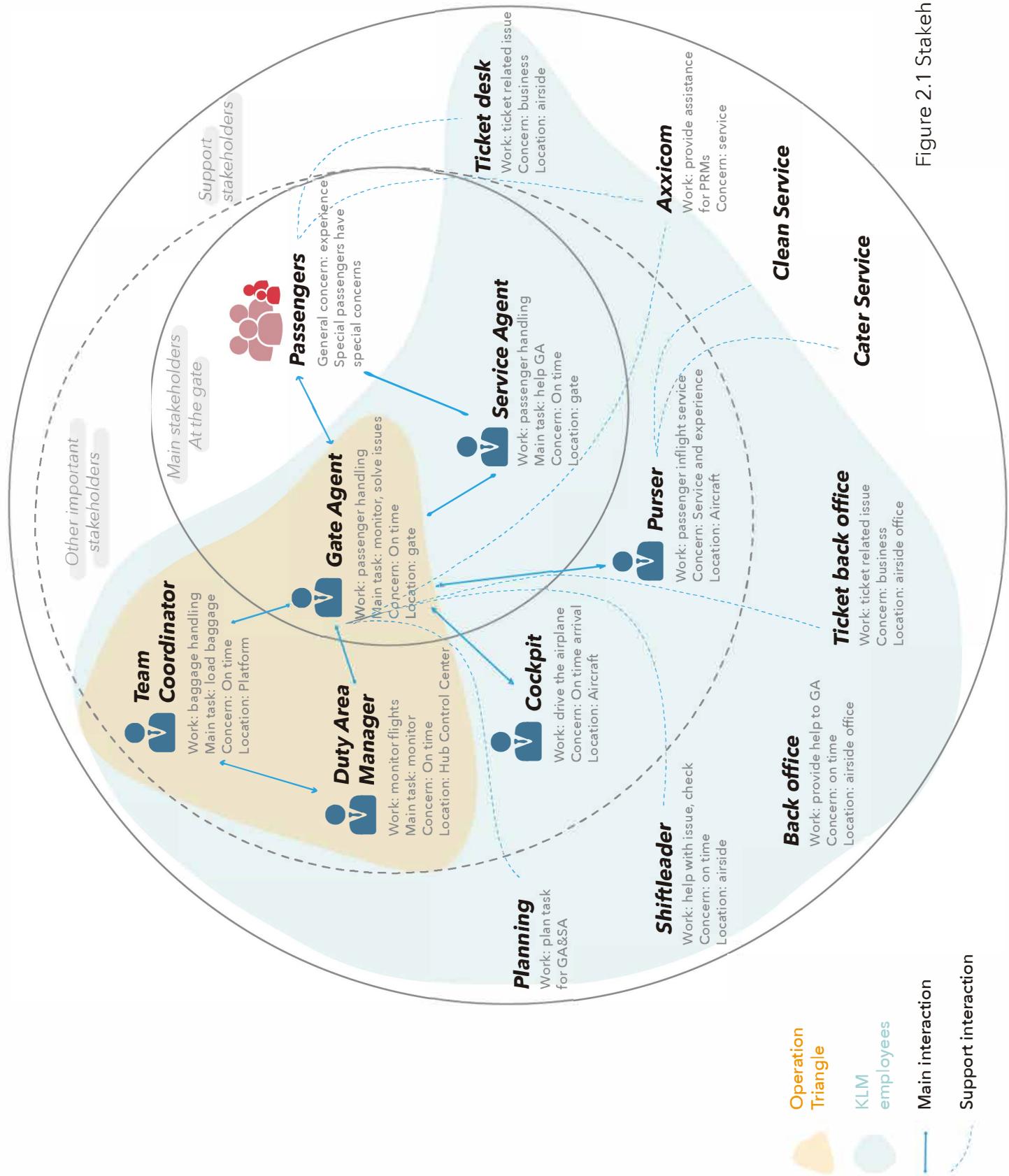
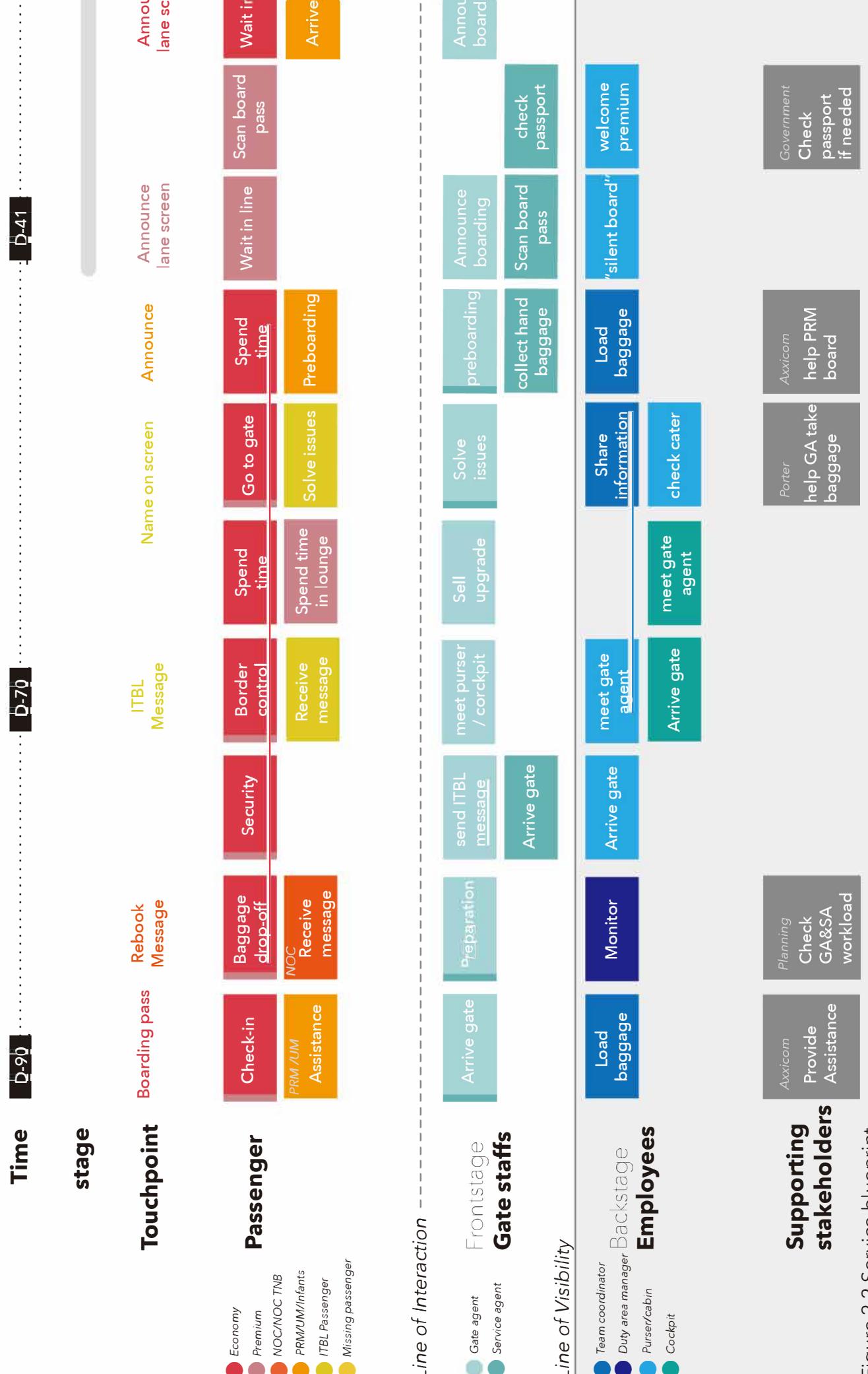
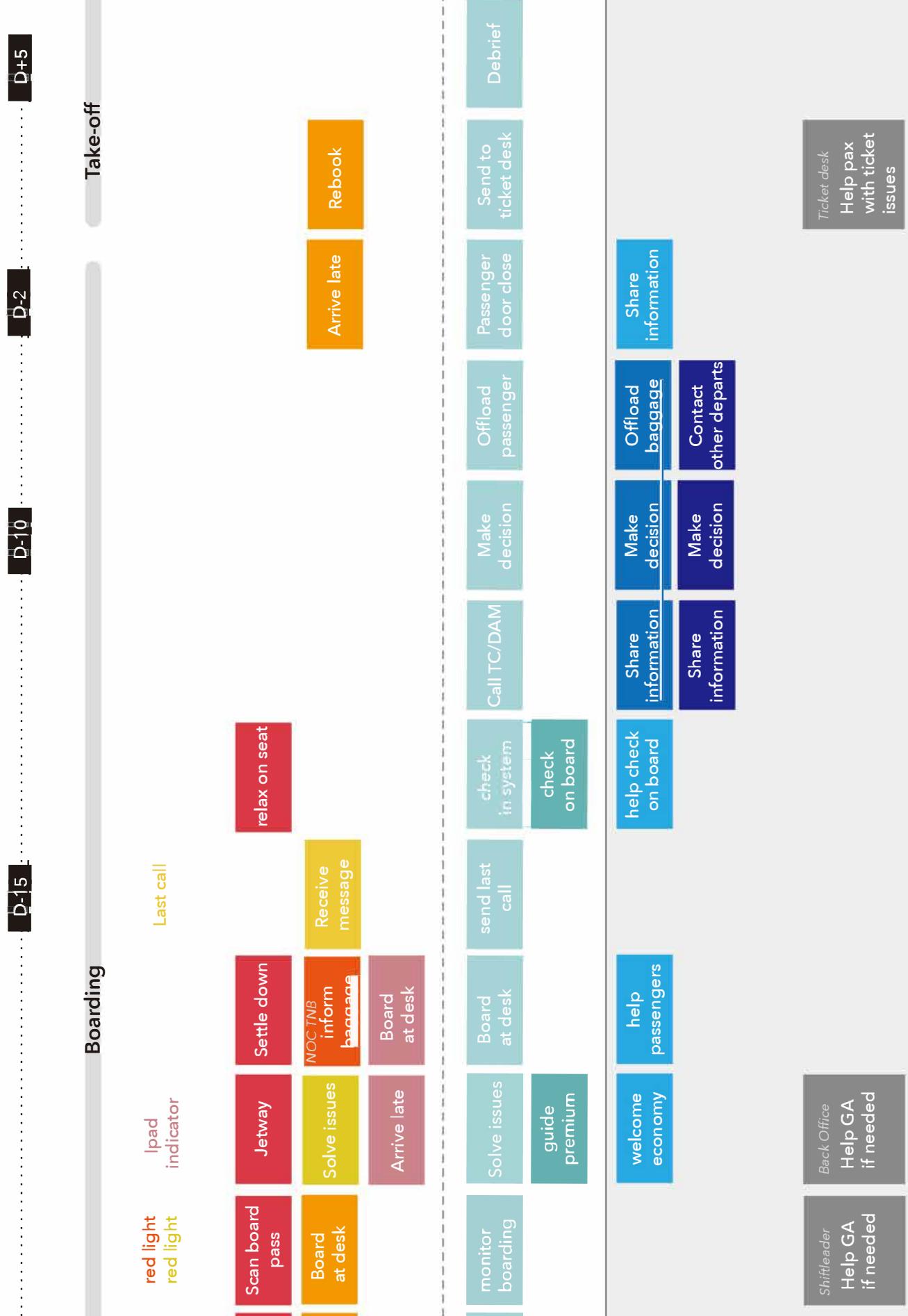
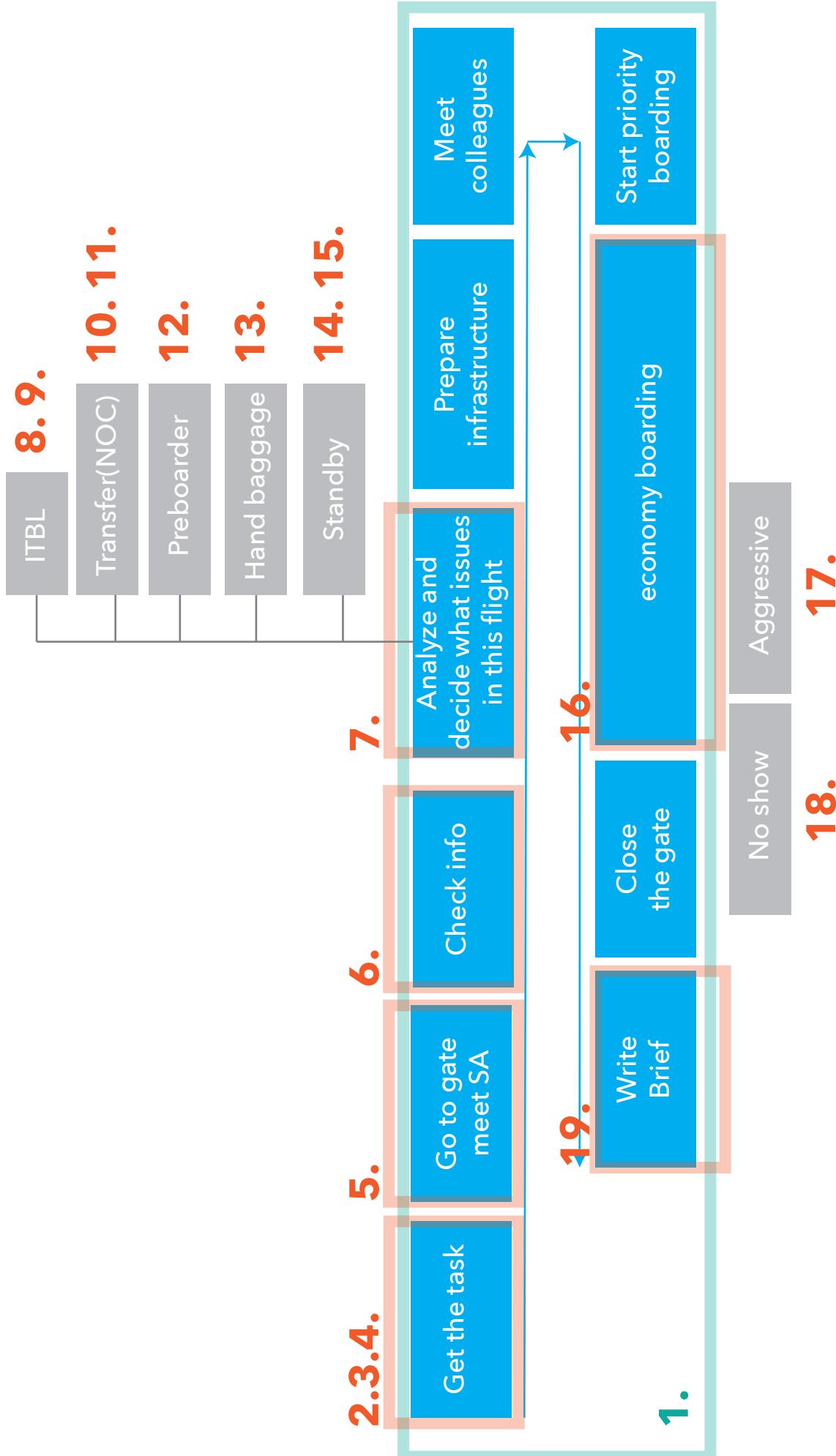


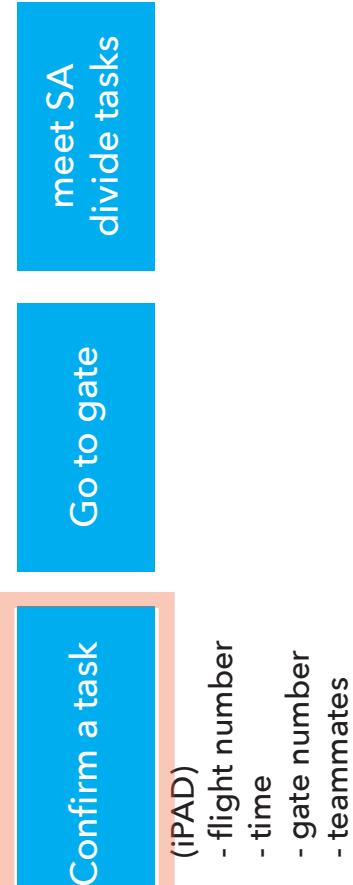
Figure 2.1 Stakeholder map



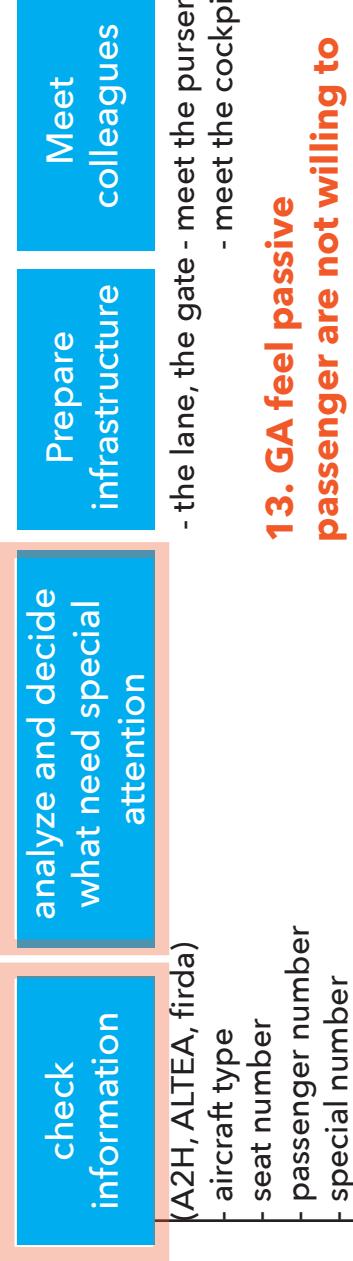




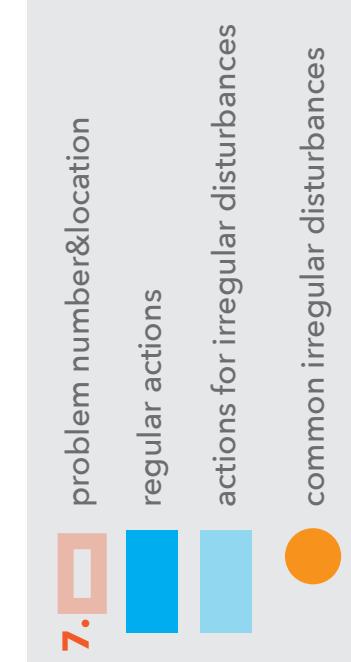
7. uncertain about the coming workload



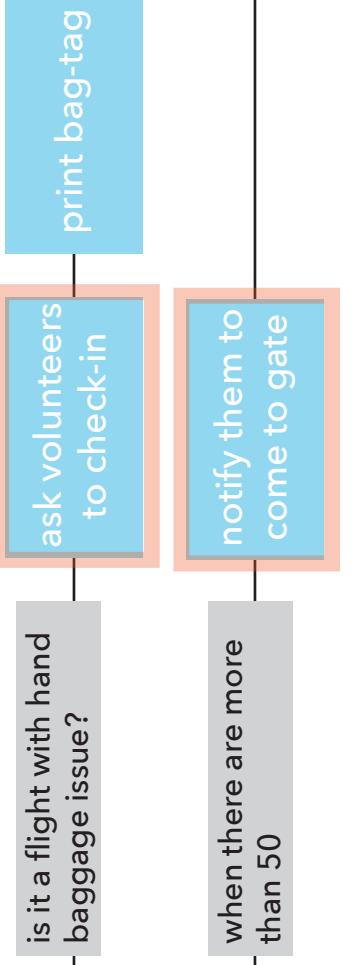
8. need go through several tools to gather info



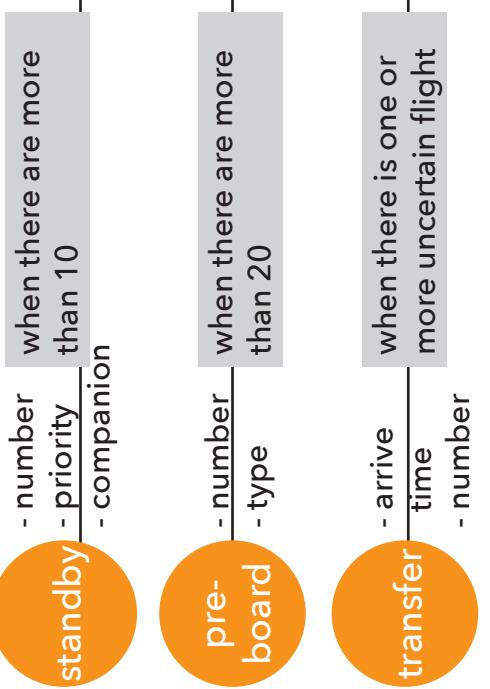
9. need to analyze in brain and always keep in mind



13. GA feel passive passenger are not willing to



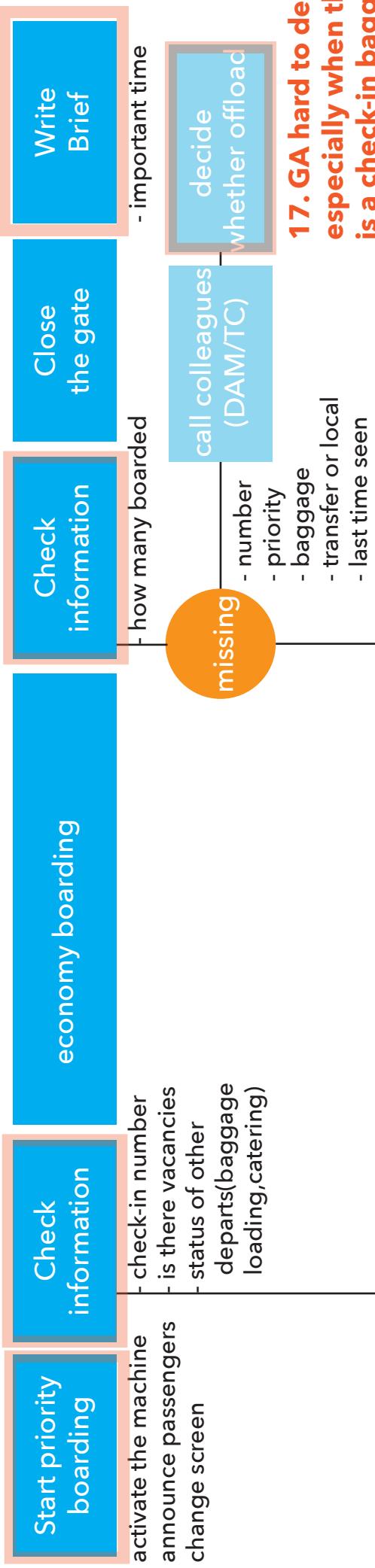
14. GA feel passive passenger are worry (no reason in the message)



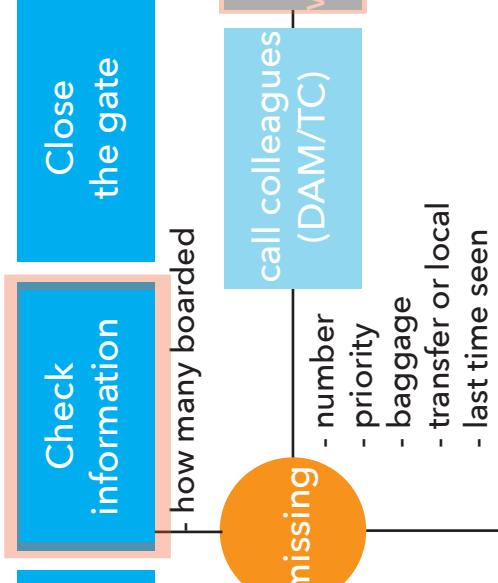
General problems

1. lack of overview of the whole process
2. lack of clear task division in group
3. lack of time reminder
4. diversed workload according to flight
5. double work when there is a SA with less experience
6. need go through several tools to take action

10. need to open three programmes



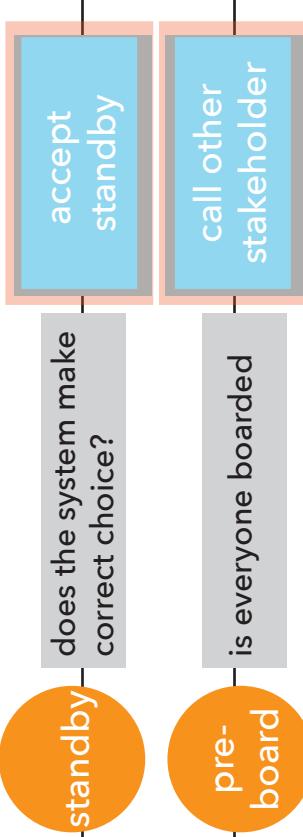
11. need to check info multiple times



12. brief does not provide much info



15. system usually make wrong choice



16 need time to find number



Special cases

18. some NOC arrived, but they are told that they can't board because they are rebooked.

19. GA feels unsupportive when there is an aggressive passenger

My solution

- 1. lack of overview of the whole process
- 2. lack of clear task division in group
- 3. lack of time reminder
- 4. diverted workload according to flight
- 5. double work when there is a SA with less experience

whole process

- 6. need go through several tools to take action
- 7. (new agents)uncertain about the coming workload
- 8. need go through several tools to gather info
- 9. need to analyze in brain and always keep in mind
- 10. (start boarding)need to open three programmes
- 11. need to check info multiple times
- 12. brief does not provide much info

regular actions

- 13. (hand baggage)GA feel passive, passenger are not willing to **check in baggage**
- 14. (notify ITBL)GA feel passive, passenger are worry (**no reason in the message**)
- 15. (accept standby)system usually make wrong choice
- 16. (find late preboarder)need time to find number
- 17. (decide whether offload)GA hard to decide especially when there is a **check-in baggage** (need time to find baggage and offload, during it maybe passenger will come)
- 18. some NOC arrived, but they are told that they can't board because **they are rebooked.**
- 19. GA feels unsupportive when there is an aggressive passenger

irregular actions

- all above are small functions inside
- all above are small functions inside
- ii. **operational dashboard**

perceived as problem by GA

Current solution all dependent on senior expertise of Gate Agent

Questionnaire

Test: _____
Participant: _____

How do you feel about the concept in general?

<i>Boring</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<i>Interesting</i>
<i>Old-fashioned</i>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<i>Novel</i>
<i>Efficient</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<i>Inefficient</i>
<i>Passive</i>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<i>Proactive</i>
<i>In control</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<i>Out of control</i>
<i>Cumbersome</i>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<i>Straightforward</i>
<i>Confusing</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<i>Clearly structured</i>
<i>Supportive</i>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<i>Unsupportive</i>

Which part do you like the most? _____

Which part do you like the least? _____

How do you feel about the user interface? (old and new)

<i>Understandable</i>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<i>Hard to understand</i>
<i>User friendly</i>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<i>Unfriendly</i>

Before
After

How do you feel about the current digital tools in general?

<i>Boring</i>	<input type="radio"/>	<i>Interesting</i>				
<i>Old-fashioned</i>	<input type="radio"/>	<i>Novel</i>				
<i>Efficient</i>	<input type="radio"/>	<i>Inefficient</i>				
<i>Passive</i>	<input type="radio"/>	<i>Proactive</i>				
<i>In control</i>	<input type="radio"/>	<i>Out of control</i>				
<i>Cumbersome</i>	<input type="radio"/>	<i>Straightforward</i>				
<i>Confusing</i>	<input type="radio"/>	<i>Clearly structured</i>				
<i>Supportive</i>	<input type="radio"/>	<i>Unsupportive</i>				

How do you rate the difficulty/stress level of every task?

		Before	After
1. Confirm the task		<input type="radio"/>	<input type="radio"/>
2. Meet SA and divide the tasks		<input type="radio"/>	<input type="radio"/>
3. Check special passengers		<input type="radio"/>	<input type="radio"/>
4. Prepare preboarding		<input type="radio"/>	<input type="radio"/>
5. Start priority boarding		<input type="radio"/>	<input type="radio"/>
6. Accept standby passengers		<input type="radio"/>	<input type="radio"/>
7. Start economy boarding		<input type="radio"/>	<input type="radio"/>
8. Handle aggressive passenger		<input type="radio"/>	<input type="radio"/>
9. Manage missing passengers		<input type="radio"/>	<input type="radio"/>
10. Close gate and brief		<input type="radio"/>	<input type="radio"/>

