Q1.

- The use of automated gate system and RFID tracking system.
- Increase the productivity of container handoff.
- Speed the entry and exit of trucks through terminal gates and increase the fuel efficiency.
- Improve the truck management, reduce ques and cognition around gates.

Q2.

- RFID improves the gate efficiency through improved truck management, reducing queues and cognition around gates and removing the number of trucks from public roads by streamlining procedures.
- Tighten security by providing accuracy on inbound and outbound truck movements through terminals.

  Eg: System automatically check whether a truck has a booking and whether it has a permission to enter the terminal.

- Eliminate the lengthy paper transaction and manual data input errors.

Q3.

- Improving customer satisfaction enhancing the efficiency of customer's supply chains through smoother, faster, and more effective of their containers at the terminal gates.
- OCR system at the gate track whether the container is loaded or not, identify its unique I'D number and truck license plate numbers as a a backup identification.
- Then the system automatically determines whether the track is on time, which is an important information for efficient pickup and drop off containers.

Q4.

Managerial

- High implementation cost during the early stage of RFID project.
- Spent several months performing proof-of-concept trials involving several competing RFID suppliers.
- Challenge for vendors that are rugged environmental condition at ports which is required 99.5% of all tags are read successfully.

Organizational

- Training programs for the employees to teach them how to use the new system as they're adapted to the old system.
- Adapting to new culture and environment by the employees, if the employees are not willing to learn or not familiar to the system, it may become a challenge to the organization.

Technological

- Additional server space and capacity is required to implement the new system (RFID).
- It may not run smoothly at the beginning of the implementation.
- Occurrence of errors during the testing process, breaking down of the system due to the server failure.