2. Introduction

Nowadays, trucks are used to carry goods across the country. However, after they deliver the goods, the truck usually come back empty. This will cost driver as they are wasting fuel without the goods. Our project looks to solve this problem by propose a solution: when driver comes back after a delivery, they will also pick up and deliver additional goods from other owners on their way. We provide mobile phone application for driver to search for goods when they return and for goods owner to send their request for delivery. We also build website for necessary management for both admin and user.

3. Current Situation

- First of all, truck driver only deliver goods for one owner at a time. Therefore, when they finish deliver goods for the owner, they usually return home without anything.

- Secondly, some goods owners have personal contact of truck driver. When driver is on the road, they call the truck driver to deliver goods for them as a personal favor.

4. Problem Definition

- When driver returns without goods, they waste fuel money only on travelling.

- When owner contacts driver by themselves, this may not work all the time because driver’s road and owner’s road do not match. Besides, there is no third party to enforce the arrangement between them, thus when driver decides to disappear with the goods, goods owner will lose their goods and money.

5. Proposed Solution

We propose a new solution for goods owner and truck driver to solve these problem. Our system includes mobile phone application and website application for truck driver and goods owner.

5.1 Feature functions

* Admins can manage accounts, orders, transactions…
* Truck drivers can
  + Post their road, container size, contact info…
  + Make arrangement with goods owners and delivery items on their way back.
* Goods owners can
  + Search for driver.
  + Request for delivery and make deal with truck drivers.
  + System will allow goods owners to track their order’s status.

5.2 Advantages and disadvantages

Advantages:

* Truck driver can save money on fuel.
* Guarantee the goods is delivered with care.
* Increase income for truck drivers.
* Goods owners can find appropriate drivers quickly.

Disadvantages:

* Truck driver must have smartphone with GPS.
* Internet must be available so users can utilize all features.
* Both owners and drivers must knowledge in using smartphone.

6. Functional Requirements

Function requirements of the system are listed as below:

* Truck drivers:
  + Publish the destination with specified date, container size, contract information…
  + Define the proposed road and/or adjust depending on the goods owners.
  + Suggest goods owners for truck driver.
  + Optimize road for truck drivers.
* Goods owners:
  + Search and get suggestion about truck drivers.
  + Make deals with truck drivers and make orders to transfer their items.
  + Allow goods owners to track their order’s status.