**1.1**

**REV**

**B2B Freight e-Marketplace**

**FUNCTIONAL SPECIFICATION**

**REVISION HISTORY**

|  |  |  |  |
| --- | --- | --- | --- |
| **DATE** | **DETAILED DESCRIPTIONS** | **VERSION** | **UPDATED BY** |
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# 1.0 FUNCTIONAL BLOCK

# 1.1 Operational Planning

Operational Planning

Vehicle & Driver Planning

Route Planning

Load Design

Shipping Consolidation

1. **Shipping consolidate**

* Carrier will collect the item from warehouse outbound of the shipper to distributed centre.
* Carrier will gather all the item and do consolidation.

1. **Load design**

* Carrier will do load planning to loading pallets into trucks (three dimensional).
* Design is done based on criteria such as sequence of loading and unloading and stackability of the products.

1. **Route Planning**

* To help the driver plan the journey.
* Optimizing the route based on the geographical maps to decrease routing time and fuel efficiency.

1. **Vehicle and driver planning**

* Allocate the vehicles and drivers to deliver the stock.

# 1.2 Operational Execution

Operational Execution

Order Entry

Communication

Order Status Information

Execution Monitoring

1. **Order Entry**

* Registration and management of orders.

1. **Execution Monitoring**

* Real time to track the vehicle location and support corrective actions.

1. **Order Status information**

* To record the information related to the pick-up and delivery shipments.
* Used to monitor the execution of the transport on every order.

1. **Communication**

* Facility to send message/broadcast to all or one vehicle driver.

# 1.3 Billing/Finance

Billing / Finance

Customer Billing

Reporting

Transport Cost Allocation

Time and Labour

1. **Customer billing**

* Includes invoice creation based on the agreements made, like rates, fees and extra charges.
* Facility for online payment.

1. **Time and Labour**

* The registration of the actual time and labour that was spent on the transport order.
* This is used to calculate the actual transportation costs per order.

1. **Transport Cost Allocation**

* Allocation of transport costs towards cost centres and cost objects.

1. **Reporting**

* Based on the data to generate report.

Process Flow

* Once fleet owner success bid the task, system will create a freight order based on customer booking details, freight order detail like freight name, description, weight, pickup and drop off address.
* Fleet owner can edit/delete freight order
* User can create zone based on address or postal code.
* System will differentiate all the order to the specific zone (north, west, east, south).
* System can generate pickup and delivery order based on the area.
* System can generate route based on pickup and delivery order.
* Fleet owner can check the status of the driver of the day and assign the driver to handle the route.
* System will auto generate customer invoice and receipt

**Transport Management System - Web Portal**

Freight Order Page

* Freight order will show on this page for fleet owner to **view** and **edit** the details.
* System will get the freight details from customer booking page and populate to fleet owner freight order page.
  + Package type
  + Pickup date
  + Drop off date
  + Pickup name
  + Pickup Address
  + Pickup contact number
  + Pickup email
  + Pick up quantity
  + Drop off name
  + Drop off address
  + Drop off contact number
  + Drop off email
  + Drop off quantity
  + Status

Zone Maintenance page

1. Fleet owner can **create** the zone details from this page.
   * Zone name (example: East, West)
   * Zone description
   * Area name (example: Serangoon)
   * Area postal code first two digit (example : 33)
2. Fleet owner can **view, edit and delete** zone information.

Pickup Order page

1. Fleet owner can pick the date on calendar.
2. Click “Generate pickup order” button
3. System will retrieve all the order for pick up based on the date and list all the order details group by zone.
   * Pickup Date
   * Pickup Name
   * Pickup Address
   * Pickup Contact Number
   * Pickup Email
4. Fleet owner can click “Generate Route” button for the zone and system will populate address and redirect to smart route planning page.

Delivery Order Page

1. Fleet owner can pick the date on calendar.
2. Click “Generate delivery order” button
3. System will retrieve all the order for delivery based on the date and list all the order details group by zone.
   * Delivery Date
   * Delivery Name
   * Delivery Address
   * Delivery Contact Number
   * Delivery Email
4. Fleet owner can click “Generate Route” button for the zone and system will populate address and redirect to smart route planning page.

Smart Route Planning Page

1. This page will list out all the pickup/delivery address in the way point list box.
2. Fleet owner can add or delete address in the way point list box.
3. Fleet owner can click “Draw direction” button to generate the optimize route for the zone.
4. Fleet owner can save the route to database.

Driver and Vehicle Allocation Page

1. System will list all the saved route on this page
   * Route name
   * Start Time
   * End Time
   * Assigned Driver
   * Assigned Vehicle
   * Status
2. Fleet owner can click Assigned Driver field and system will prompt out a sub page to list down all the driver information who is available on the time slot(start time and end time) for fleet owner to choose.
   * Driver Name
   * Available time of the day
3. Fleet owner can click Assigned vehicle field and system will prompt out a sub page to list down all the vehicle information which is available on the time slot(start time and end time) for fleet owner to choose.
   * Vehicle type
   * Vehicle plate number
   * Vehicle container size
   * Available time

Return Process

* If the driver unable to meet the receiver more than 2 times, the item will be return to the fleet owner office.

1. Driver can create a return order if the customer unable to pick up the item on second time.
   * Return Order ID
   * Freight Order ID
   * Date of 2nd delivery date
   * Carrier name
   * Shipper name
2. After return order is created, system will email the return order to the customer and customer can use the return order to pick up their item on fleet owner office.

Freight claim

* If the receiver receive the item is damaged or broken, they can go to Freight Claims Page to create a claim form for reimbursement.

Finance Module - Delivery Note, Invoice and Transaction History

Invoice Receipt

1. After shipper done the payment, system will generate electronic invoice and send to shipper email for record purpose.
2. Shipper also can go to transaction history page to view or print out the invoice receipt.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***INVOICE***  [**Fleet Owner Company Name**]  [Street Address]  [City, Portal Code] [Invoice Number]  [Phone][Fax] [Date]  Delivery Date : [10/07/2017]  Delivered To : [Receiver Name]  [Dropoff Address]  [HP No]   |  |  |  |  | | --- | --- | --- | --- | | Item Description | Quantity | Weight(kg) | Amount | |  |  |  |  |     Total Amount:  **Thank You** |

Delivery Note

1. System will generate an electronic delivery note on the driver apps, receiver have to sign on delivery note when they received the item.
2. System will send email with attached delivery note to buyer.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Delivery Note***  [**Carrier Company Name**]   |  |  | | --- | --- | | Code |  | | Date |  | | Shipping Date |  | | Delivery man |  |   **Ship To:**  [Receiver]  [Dropoff Address]  [Phone No]   |  |  |  | | --- | --- | --- | | No | Description | Quantity | |  |  |  |     Received By,  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  [Date]  **Thank You** |

Transaction History

* Shipper and fleet owner can search for the record of invoice and delivery note from the system.
* Fleet owner/shipper can key in any search criteria and click “Search” button
* Search Criteria
  + Shipping date
  + Invoice number
* System will based on the criteria to retrieve the invoice and delivery note from database to display on screen.
* Fleet owner can click “Print” button to print out the hardcopy.

**Mobile**

Driver App

1. Today task page – to list all the task to be complete on the day.
2. Planned Route page – show the map with planned route for the driver and list all the point details(customer information and address)

Process Flow

Customer create order

Fleet owner success bid the task

System auto generate freight order

System differentiate order to different zone

System generate pickup and delivery order from category

Fleet owner assign driver for the specific route

Executing transportation shipment

System create freight settlement document (customer invoice/receipt)

Fleet owner assign driver for the specific route

To be developed:

* Payment and settlement
  + Case 1:Customer paying to platform and platform pay back to fleet owner(for every booking platform will get revenue).

a.       Customer cancels or changes the order(All the settlement should be done)

b.       Fleet owner cancels or changes the order(All the settlement should be done)

c.       Whoever cancels the order must pay a minimum amount to platform(Notification to the respective person)

* Suggestions while assigning driver / Container

Fleet owner can click Assigned vehicle field and system will prompt out a subpage to list down all the driver/vehicle information which is available on the time slot(start time and end time) for fleet owner to choose.

* + Driver details/ Availability
  + Vehicle type/Vehicle container size/Available time

* Recalculation and re-scheduling after Bidding
  + Rate Management and automated Bidding/Suggestion.
  + Rate recalculation when customer changes the Date and  pickup/deliver points.
  + If customer changes the order after bid win platform should notify the fleet and ask the fleet to quote again.
  + The payment should be handled properly before and after the change request.

* Delivery Note(DO)
  + System will generate an electronic delivery note on the driver apps, receiver have to sign on delivery note when they received the item.
  + System will send email with attached delivery note to Sender/Carrier.

* Transaction History
  + Shipper and fleet owner can search for the record of invoice and delivery note from the system.
  + Fleet owner/shipper can key in any search criteria and click “Search” button
  + Search Criteria
  + Shipping date
  + Invoice number
  + System will based on the criteria to retrieve the invoice and delivery note from database to display on screen.
  + Fleet owner can click “Print” button to print out the hardcopy.