

System Request

Project	Express Delivery
Sponser	<ul style="list-style-type: none"> - Division of Logistics, Department of Industrial Promotion - PTTOR (PTT Oil and Retail Business PCL)
Business Need	<ul style="list-style-type: none"> - Increasing revenue - Customer satisfaction - Reducing lead time

Business Requirement

Topic	
1. Objective	<ul style="list-style-type: none"> - Using the application, or in-store kiosks, customers will be able to track their parcels, estimate price, and pick up service.
2. Stakeholders and their roles	<ul style="list-style-type: none"> - New customers - Customers - Board of Directors - Investors - Partners - In-store employees : customer service, packaging, weighting and calculate price - Warehouse employee : check stock, pack for deliver, separate the order by postal code - Delivery/Transportation : รับของจากหน้าร้าน,ไปส่งตามที่ต่างๆ
3. Assumption and constraints	<ul style="list-style-type: none"> - No same day delivery - Reject the <i>over</i> large weight order.
4. Functional specification	<ul style="list-style-type: none"> - Search the tracking number and locate where parcels are - Establish customer accounts - Send parcel - Pre-calculation of sending cost - Preparation of sending parcel by fill in the information at home to reduce traffic in store - Warehouse database

5. Non functional requirements	<ul style="list-style-type: none"> - Security - User friendly
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Business Value

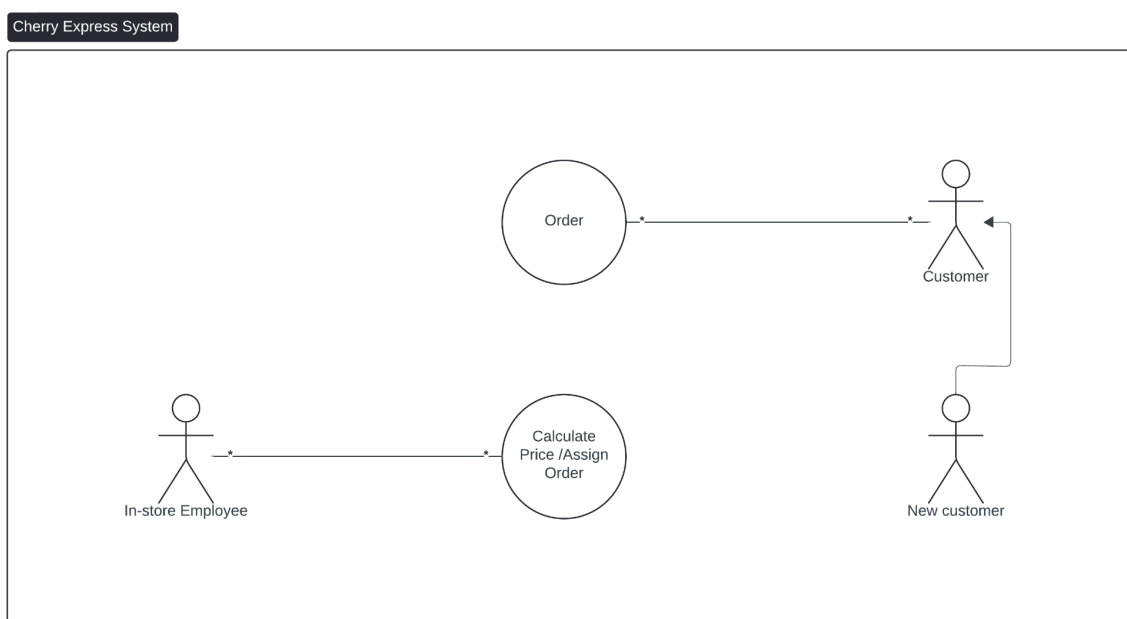
At Cherry Express, our business value centers on being the first choice for customers when they need to deliver parcels. We streamline supply chain processes to ensure operational efficiency and timely deliveries, enhancing customer satisfaction and loyalty. Our reliable systems and dedicated employees guarantee that parcels are handled with care, minimizing the risk of damage. By reducing costs and enabling market expansion, we contribute to better profit margins and competitive pricing. Additionally, our integration of advanced technologies enhances visibility and flexibility in our operations. With a commitment to sustainable practices, Cherry Express not only boosts its brand reputation but also adapts swiftly to market changes, ensuring we remain the go-to logistics partner for all delivery needs.

Conservative estimates of tangible value to the company include the following:

- 12M฿ in transport and logistics services

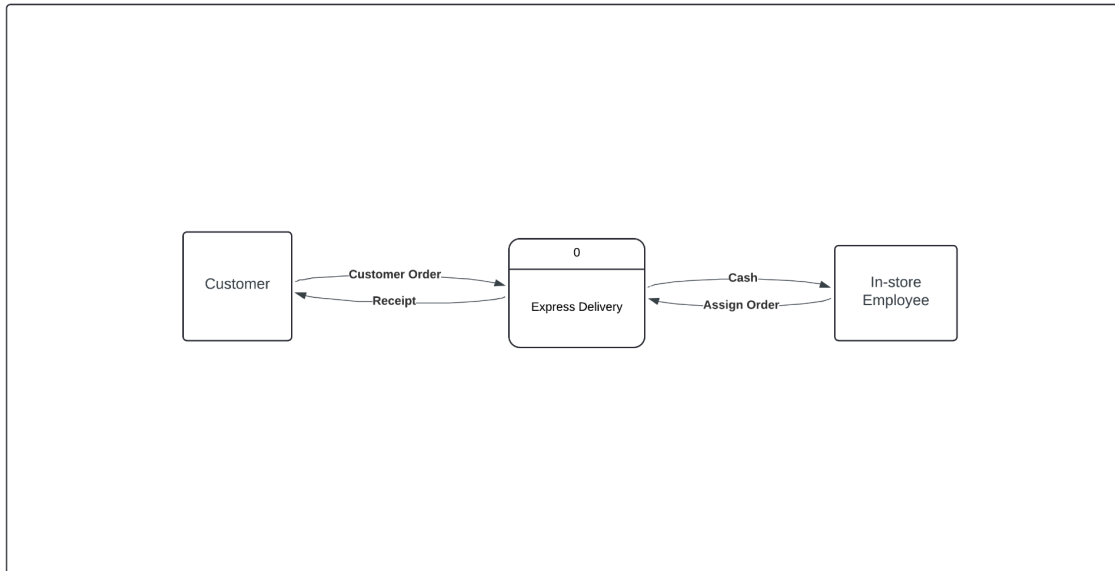
Use Case Diagram

https://lucid.app/lucidchart/03e9393f-99f4-4523-9c26-cab466082875/edit?viewport_loc=47%2C-57%2C2219%2C1017%2C0_0&invitationId=inv_ad90b866-77f1-4ade-8f01-4a16c99ff420



Data Flow Diagram

Context Diagram



Draft Screen Flow

(แสดงหน้าจอต่างๆของระบบ โดยอาจจะทำเป็นว่าต้องใช้ข้อมูลอะไรบ้าง หลังจากกรอกข้อมูลแล้วแสดงผลหน้าไหนต่อ รวมไปถึงเก็บข้อมูลที่ไหนบ้าง)
 ปล.คร่าวๆก็พอ

Customer

- Login
- Tracking
- Edit Profile
- Store Location
- Main page

Pre - Calculation	Preparation 👤 user
<p>Type of Product</p> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <div style="display: flex; justify-content: space-between; align-items: center;"> Standard Registered Express ▼ </div> </div> <p>Weight <input style="width: 80px;" type="text"/> kg</p> <p>Price <input style="width: 100px;" type="text" value="shown Price (THB)"/></p>	<p>Sender's Name <input style="width: 150px;" type="text"/></p> <p>Phone number <input style="width: 150px;" type="text"/></p> <p>sent to <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> <div style="display: flex; justify-content: space-between; align-items: center;"> chocolate village, mountain ville, strawberry road, suetchat town ▼ </div> </div></p> <p>Postcode <input style="width: 80px;" type="text" value="XXXXX"/></p> <hr style="border-top: 1px dashed black;"/> <p>Receiver's Information</p> <p>Name <input style="width: 150px;" type="text"/></p> <p>Phone number <input style="width: 150px;" type="text"/></p> <hr style="border-top: 1px dashed black;"/> <p>Parcel Type</p> <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> <div style="display: flex; justify-content: space-between; align-items: center;"> Standard Registered Express ▼ </div> </div> <p style="text-align: center; margin-top: 20px;"><input style="width: 80px;" type="button" value="submit"/></p>

PRINT

Order ID : 12345678

Date : 12/12/12 12:00

Payment : cash-on delivery

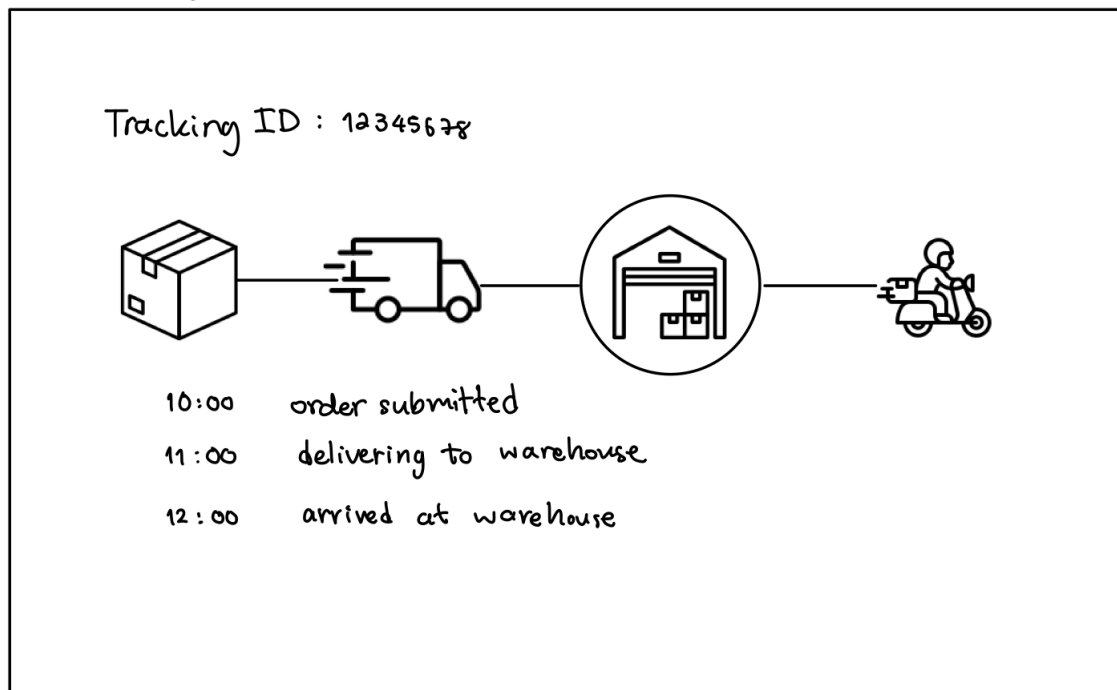


<p>Sender</p> <p>ABC DEF</p> <p>12/34 Pathumwan</p> <p>Bangkok 10330</p> <p>0987654321</p>	<p>Receiver</p> <p>ABC DEF</p> <p>12/34 Pathumwan</p> <p>Bangkok 10330</p> <p>0987654321</p>
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ORDER TRACKING

TRACKING NUMBER :


Tracking



In-store

- Login
- Calculation
- Print

LOGIN



ID


Password

forget password?

PRINT

Order ID : 12345678

Date : 12/12/12 12:00 Tracking number 1-234-5678



Sender	Receiver
ABC DEF	ABC DEF
12/34 Pathumwan	12/34 Pathumwan
Bangkok 10330	Bangkok 10330

Assign Order

Date

PARCEL

Dimension x x cm ▼

Weight kg ▼

Item eg. clothes, toy

LOCATION

From <input type="text"/>	To <input type="text"/>
City <input type="text"/> ▼	City <input type="text"/> ▼
postcode <input type="text"/> ▼	postcode <input type="text"/> ▼

Customer

Sender	Receiver
Name <input type="text"/>	Name <input type="text"/>
ID <input type="text"/>	ID <input type="text"/>

Warehouse

- Group by region

number of orders

Warehouse	Number of Orders
Warehouse 1 (Bangrak)	15
Warehouse 2 (Pathumnan)	10
Warehouse 3 (Sathorn)	20
Warehouse 4 (Sampantawong)	15
Warehouse 5 (Pranakorn)	15
Warehouse 6 (Yannawa)	12

Tracking number	order_name	destination	duedate	sent
001	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input checked="" type="checkbox"/>
002	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input checked="" type="checkbox"/>
003	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input checked="" type="checkbox"/>
004	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
005	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
...				

Delivery Man

- Amount /Location /Distance /Time /Customer Contact /Payment Method
- Customer's signature

10:00

Stop #1 of 9 Tracking number 1-234-5678

Location

International House of Tiramisu Cake
1150 Southwest Upper Highland
Portland, OR 97221

Distance / Time (From Current Location)

1.2 km / 15 min.

Order

1. X unit

2. X unit

3. X unit

4. X unit

5. X unit

...

Customer Contact

Mr. John Dalton
Tel. 09x-xxx-xxx

Payment Method

Promptpay

Receiver's signature

sign here

Business Analytic

For running a logistics company, a well-designed dashboard should provide a comprehensive view of key performance indicators (KPIs) and essential data to ensure smooth operations. Here are the critical elements that our dashboard should include to further the analysis:

1. Order & Delivery Status

- Total Orders: Number of orders processed, pending, or completed.
- Real-time Delivery Tracking: Status of all shipments (in transit, delayed, delivered, etc.).
- Estimated Delivery Time: Expected delivery times and deviations.
- Customer Notifications: Alerts for customers about package statuses (shipped, out for delivery, etc.).

2. Fleet Management

- Vehicle Tracking: Real-time GPS tracking of all vehicles.
- Fuel Consumption: Monitoring fuel usage for cost efficiency.
- Maintenance Alerts: Vehicle health, upcoming maintenance schedules.
- Driver Performance: Delivery speed, driving habits, idle time.

3. Warehouse Operations

- Inventory Levels: Current stock, pending orders, restocking alerts.
- Processing Times: Average time for picking, packing, and shipping.
- Capacity Utilization: How much warehouse space is being used versus available.

4. Customer Service & Satisfaction

- Complaints & Queries: Number of customer complaints or service issues.
- Customer Satisfaction Scores: Ratings or feedback from customers on services.
- Return & Refund Rates: Frequency of returned packages or refunds issued.

5. Financial Metrics

- Revenue & Expenses: Current financials, including income from services and operational expenses (fuel, labor, etc.).
- Profit Margins: Key indicators of profit versus operational costs.
- Outstanding Payments: Unpaid customer invoices or pending charges.

6. Delivery Route Optimization

- Route Efficiency: Analysis of the most efficient delivery routes.
- Traffic Conditions: Real-time updates on traffic or delays.
- Weather Impacts: Weather reports affecting delivery routes.

7. Compliance & Regulatory Monitoring

- Safety & Compliance: Ensuring vehicles and drivers meet safety standards.

- Insurance & Licenses: Alerts for expiring licenses, certifications, or insurance.

8. Employee Metrics

- Driver Availability: Which drivers are on duty and their workload.
- Staff Performance: KPIs like delivery speed, order accuracy, and feedback.

References

weerayut. “โครงการประจำปี 2567”. กรมส่งเสริมอุตสาหกรรม กระทรวงอุตสาหกรรม, 29 Jan 2024,
<https://www.dip.go.th/th/category/2024-01-29-11-49-52/2024-01-29-12-42-25>