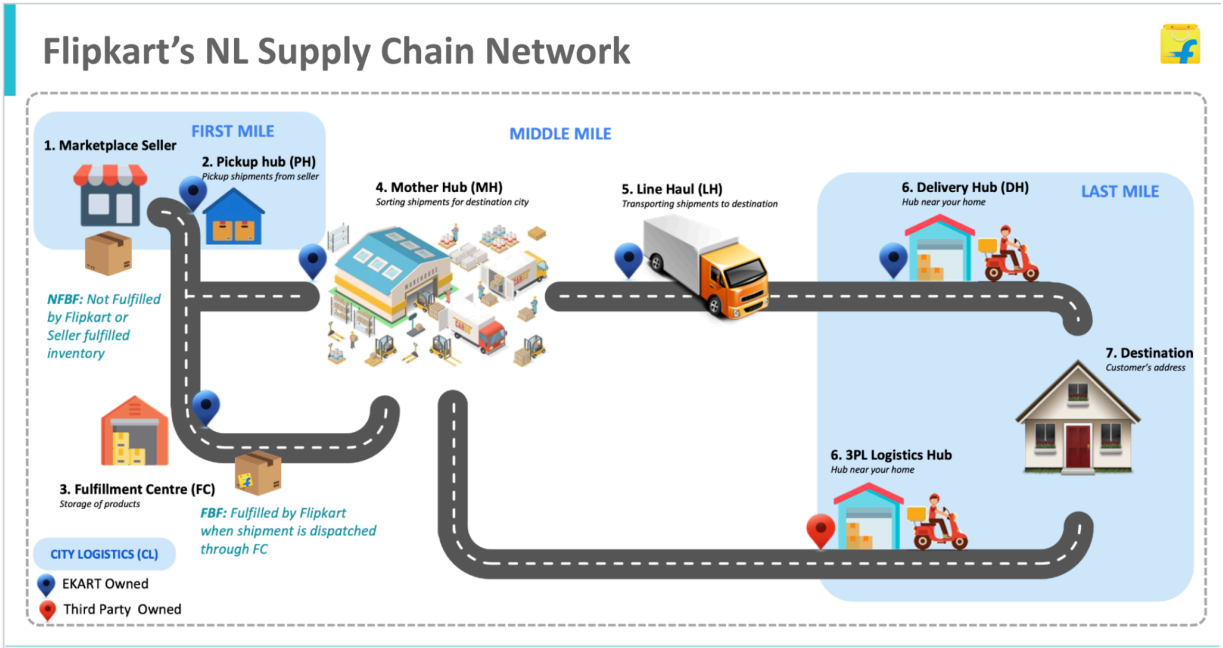
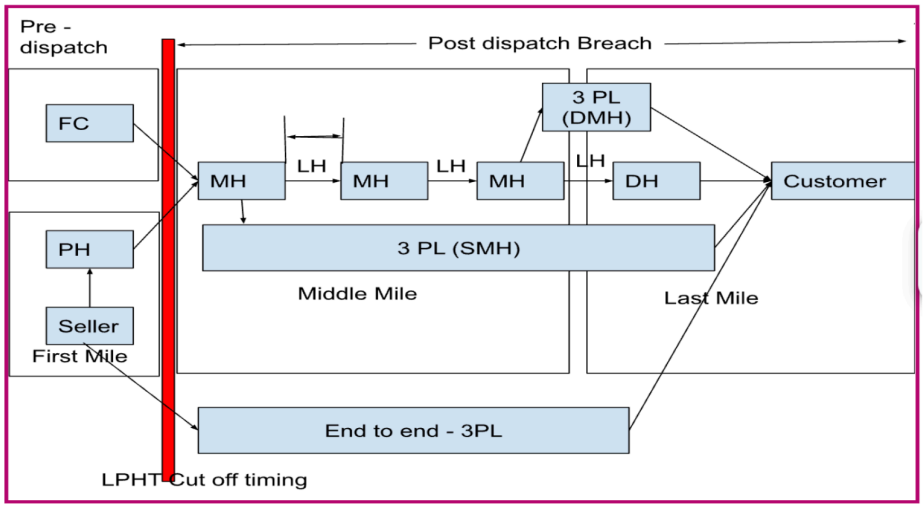
Section 1- About Ekart Supply Chain Network

Flipkart NL (Non Large Supply Chain Network Flow Diagram)-



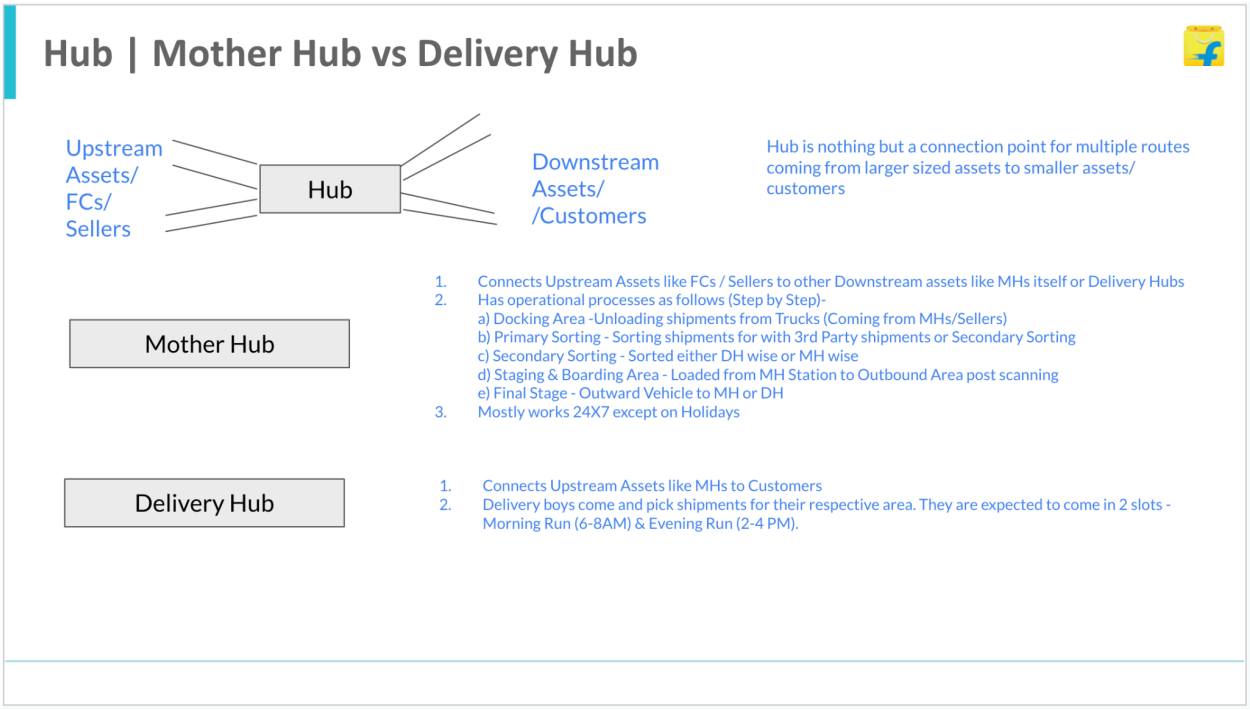
Another way to explain the same process-



Upstream
- First Mile + Middle Mile

Last Mile - Delivery Hub + Customer Door step delivery connection Route

Explaining Hubs in more Detail (Mother Hub vs Delivery Hub)



Key Terminology relevant for Non Large Supply Chain:

- **NL (Non Large) :** A
- **PH (Pickup Hub):** A starting point for collecting shipments from sellers.
- **MH (Mother Hub):** A central connection point for routing shipments from Fulfillment Centers (FCs) or sellers to downstream hubs.
- **LH (Line Haul):** The transportation network that links hubs.
- **DH (Delivery Hub):** The last connection point before shipments reach customers.
- **3PL:** Third-party logistics partners.
- **FBF/NFBF:** Fulfillment by Flipkart (managed logistics) vs. Non-Fulfillment by Flipkart (independent sellers).

NL Supply Chain Flow:

- The supply chain is divided into three main stages:
    - **First Mile:** From sellers to the Pickup Hub (PH).
    - **Middle Mile:** From PH/Mother Hub (MH) to the Delivery Hub (DH).
    - **Last Mile:** From the DH to customers.

Hub Operations:

- **Mother Hub (MH):**

    - Connects upstream assets (e.g., FCs, sellers) with downstream hubs (other MHs or DHs).
    - Handles processes like unloading, primary sorting, secondary sorting, staging, and loading shipments.
    - Operates 24/7 except on holidays.
- **Delivery Hub (DH):**
    - Links downstream hubs to customers.
    - Delivery personnel collect shipments for their area in two time slots: morning (6-8 AM) and evening (2-4 PM).

Functional Hierarchy:

- Hubs act as connecting nodes between larger assets and smaller delivery points or customers, ensuring an efficient flow of goods

Orders, Shipments & Units-
When a Customer places an Order, he gets an Unique OrderID assigned to that Order. 1 Order however can have multiple Shipments. Shipments are basically the Packages which a customer receives once he places an Order. Units are unique Items ordered by the Customer. Hence 1 shipment may have 1 or more items.

Date when the order was placed by the customer is called the Order Date.
Date when Order is promised to be delivered is called the Initial Customer Promise Date.
Difference of Initial Customer Promise Date & Order Date is called the SLA.
Date when the Order is delivered to the Customer is called the Delivery Date.
If a Customer/Supply Chain folks rejects the Order at Doorstep or Post FC has Dispatched the Order - It is called as RTO.
If Customer/ Supply Chain folks cancels the Order before FC has dispatched Order - It is called as Cancellation.

Section 2- About Breach

Definition of Breach-

- In Flipkart, for each shipment - a Promise Date is given namely “Initial Customer Promise Date” to Customers and if we deliver a shipment beyond the Initial Customer Promise Date or Shipments is marked RTO post Customer Promise Date then it is referred to as Breach
- Breaches are measured at the base of Units. So Breaches are basically defined as Total Units which were Not Delivered to Customer before Initial Customer Promise Date or got marked RTO before Initial Customer Promise Date.

Breaches can be classified into 2 Types

- CD Breaches - Customer Dependent Breach or RFR, CNR & Other Undel Total
- NCD Breached - Non Customer Dependent Breach or Supply Chain Led Breaches or SC Breach

NCD Breaches (Supply Chain Led Breaches) are attributed at different Supply Chain Assets level such as -

3PL
FC
FM
FSE
LH
LM
MH
Misroute
NCD (Unattributed)
NSS
SELLER

NCD Unattributed - is nothing but NCD breaches which could not get attributed to any asset. This happens when a certain route/ leg is not covered under ABA Planner coverage. ABA is the Tool basis which Asset attribution is done to Breach.

NCD Breaches can be further sub-bifurcated at 4 levels-

- Upstream Breaches (such as FC, FSE, FM, MH, Seller) Basically all functions before DH. It can further be divided into First Mile Breaches & Middle Mile Breaches.
- Last Mile Breaches (LM, Misroute, NSS)
- 3PL Led NCD Breaches (Only 3PL part)

NCD - LM Attributed Breaches can increase due to the following reasons-

a) Upstream Functional Breach- Shipments arrived at a Delay from Upstream to DH
b) Upstream Functional Breach is same but Extent of Upstream Functional Breach has increased (Example 12 hours Extent of Breach at DH Level)
c) Last Mile Productivity was down (Metric to observe that can be - “Number of Shipments Attempted On or Before Initial Customer Promise Date / LM Manpower”)
d) Manpower Capacity Issue (Example “Number of LM Shipments has increased but Number of LM Manpower have reduced or Remained same or has not increased in same proportion. Another example could be Number of LM Shipments have remained same but Number of LM Manpower has dropped”
e) Fake CD Breaches (If FE has marked fake RFR/ fake CNR then we term it as Fake CD Breaches. Under that scenario, they will be tagged under NCD Breaches only. Currently our Tech Infra is unable to capture Fake RFR and scope is limited to Fake CNR)

CD Breaches on the other hand can be of following Types-

- Requesting For Reschedule (RFR)
- Cannot Reach to Customer (CNR)
- Incomplete Adress (INC)
- 3PL Led CD Breaches (Third Party Partners CD Breaches) - 3PL today do not give us cuts at RFR/ CNR or INC level as Ekart Does.

Ekart gives us signal for RFR/ CNR & INC however, same signal doesnt come from 3PL though.

Deeper Reasons of CD Breaches are as follows-

1. Shopsy Category which is a part of NL is a High CD Breach category. If the share of Shopsy goes up, CD Breach also goes up. Generally Shopsy has higher CD Breach than NL category.
2. Shipments with Cash on Delivery Mode of Payment has high CD Breach. Hence, if COD Shares goes up - CD Breaches also go up.
3. Low Confidence Address share - When FE (Last Mile Delivery Boy) attempts a Delivery at Customer address he refers to the Lat/Long captured for Customer Location on App to reach to Customer house. But at times, the Actual Location of Customer Address is very far away from that indicated by Lat/Long due to incorrect capturing of Lat/Long. If the actual address is very far away from Customer house - it is called as Low Confidence address. Low Confidence address orders have very high CD Breaches compared to Gold & High (where Address intelligence is better).
4. Number of Shipments handled by LM FE/Agent also determines CD Breaches. If Number of shipments is very high (>80/ Day) - CD breaches are high. If the number of shipments are very low (<20/Day) - again CD Breaches are high.
5. If Ekart shipments are attempted post 9 PM- CD Breaches are high especially RFR component of it. So, if share of attempts post 9 PM increases, CD Breaches automatically increases. One indirect reason of Post 9 PM Share increase is Upstream Functional Breaches (Shipments arriving at delay in DH).

6. Incomplete Address (INC Address %) increase.
7. For 3PL led CD breaches- we donot have any reason stored.
8. Fake Customer RFR (Agents marking Fake RFR when Customer never requested for Reschedule)
9.

Section 3- Breach Base Rate

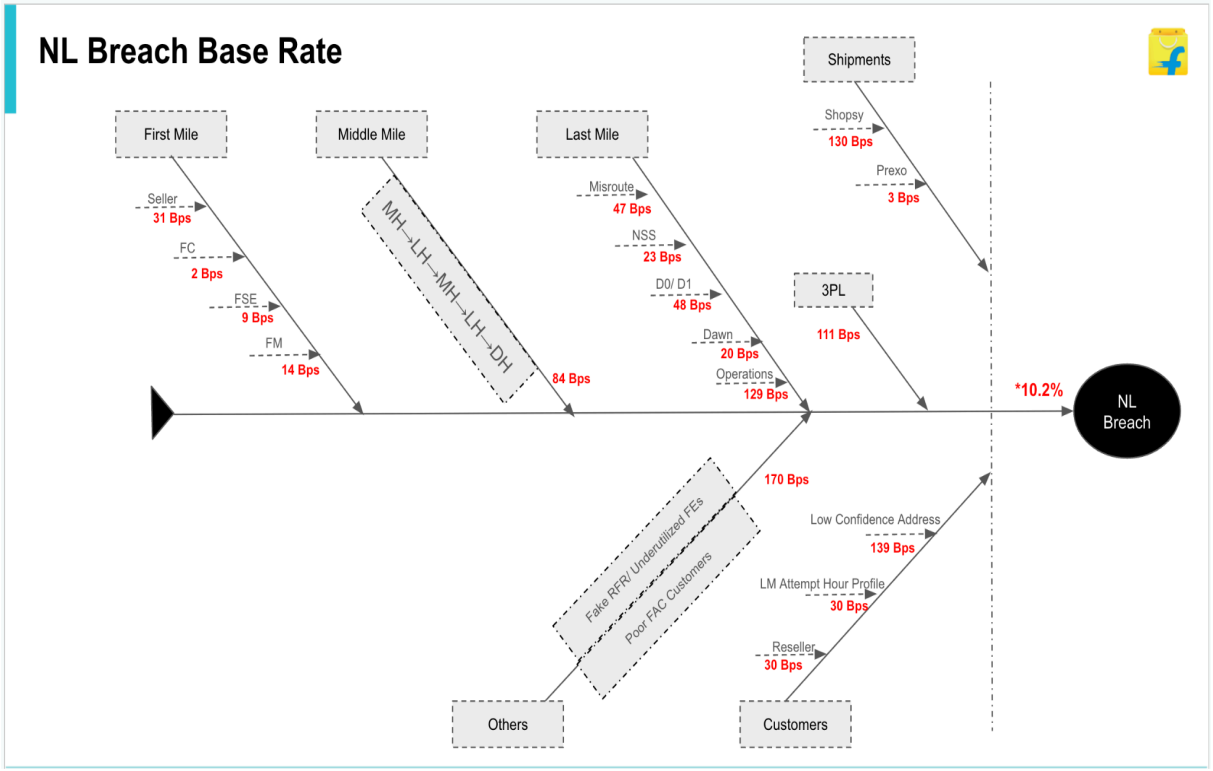
Callouts-

- *Breach Base Rate Estimation is done after taking the period from 2024 when there were No External Issues such as Rains, Floods, Breakdowns, Yatras etc & Tech Issues such as Internet Issues/ Electricity Issues/ New Tech Issues etc*
- *Base Rate may change if Platform level changes are done for SLA, CPS, Buffer, FE Manpower etc.*

For Year 2024, Breach Base Rate analysis was done. Idea was to understand Structural Reasons/ Issues which lead to Breaches and have a deeper understanding of the same. Focus was to talk about addressable bucket and not about External Issues/ Tech Issues etc.

Broadly speaking, Breach can be put under 6 Addressable Buckets-

1. First Mile Ekart
2. Middle Mile Ekart
3. Last Mile Ekart
4. 3PL only
5. Shipments
6. Customers
7. Others such as Fake RFRs/ Underutilized FEs/ Poor Converting Customers



Following are the reasons/ Proposed solutions for NL Breach under different Addressable Bucket-

NL Breach | Proposed Solutions

Category	Sub-Category	Base Rate	Proposed Solutions	Owner	Current Status
First Mile	Seller/PH/FC/FSE	56 Bps	Solves Around- Holiday Marking RTD adherence Manpower Tech Issues (LPD CPD Mismatch)	Seller Operations	Solution to be discussed
Middle Mile	MH>LH>MH>DH	84 Bps	Design TAT vs Actual TAT close monitoring and correction Changing Vendors, SOP creation & adherence , LH Vendor scorecard Manpower/ Vehicle Availability MH-DH Hops Attribution | Visibility to the issue	CT / Product	Solution to be discussed
Last Mile	Misroute	47 Bps	Full List	CL Product, SM	Solution to be discussed
	NSS	23 Bps	Need Correct Mapping of Non-Serviceable Areas/Locations	CL Product	Solution to be discussed
	D0/D1	48 Bps	To be further explored	??	Solution to be identified
	Dawn	20 Bps	To be further explored	??	Solution to be identified
	Operations/ Myntra - Externalization Impact	129 Bps	Manpower Planning, Attempt Prioritization Framework, Route Planning, DH Landing Time Estimation	CL Product/ Ops/ Analytics	Analytics Solve Being Implemented for BBD. Long Term solve to be discussed.
3PL		111 Bps	SOP Creation & Adherence, Data Visibility	Design / Operations / Product	Solution to be identified
Shipments	Prexo	3 Bps	NDWM Rate Card Improvement DWM Scaleup Capacity Planner	Operations / Design	Solution available. Implementation underway
	Shopsy	130 Bps	To be further explored	??	Solution to be identified
Customers	Low Confidence Address	139 Bps	Grid V2.1, Locality Addition during Customer Lat/Long etc. (Full List)	CL Product, FSG DS, Cart Team, FK UI Team	Solution available. Implementation underway
	LM Attempt Hour Profile	30 Bps	Customer Availability Check	CL Product	Solution to be discussed
	Resellers	30 Bps	TnS Solve to Block such customers	TnS	Solution to be discussed
Others	Fake RFR	170 Bps	RFR WA	Product	Solution available. Implementation underway
	Underutilized FEs		Agent Allocation ensuring Minimum #Shipments Cap is met for all FEs	Design/ Product	Solution to be discussed
	Customers with Poor Delivery Conversion		Identifying such customers and limiting #Attempts	TnS	Solution to be discussed