



CARGON

PHARMACEUTICAL INDUSTRY RE-IMAGINED

Background

Every year thousands of people die because of consumption of counterfeit drugs in Bangladesh. Unlike any other products, counterfeit medicines actually have the opportunity to take away someone's life. The government and concerned bodies have been trying to take proper measures to put an end to this for a very long time. But nothing seems to be working.

The only way to properly and effectively get rid of this malice is to conform to a system that gives full transparency to the consumers and every part of the pharmaceutical supply chain about the product they are purchasing/ investing in.

THE BUSINESS STANDARD

SUNDAY, JUNE 19, 2022

DT / Bangladesh News

'Adulterated and counterfeit drugs are worse than fake Covid-19 reports'

Drug authorities give 15L to families of 104 children killed by fake syrup

HEALTH

Published on 12:03 AM, August 22, 2014

THE DEADLY WORLD OF FAKE MEDICINE

High Court declares illegal inaction of Directorate General of Drug Administration in controlling business of fake medicines

In 2022, Two children died in Brahmanbaria after having counterfeit NAPA syrup and their ages were 5 and 7 years old. It is estimated that there are fake medicines worth 2500 crore in the market. Which is a big problem for our country. And it's not just our national problem it's an international problem, WHO says there is 200-Billion-dollar worth of counterfeit pharmaceutical products sold globally every year. In the year 2017 Bangladesh high court banned 20 pharmaceutical industries in Bangladesh due to low-quality drug manufacture. After the covid-19 pandemic, this problem is getting bigger every day because there is a huge drag on demand in the market. So, some people take those advantages badly and that will affect our society very badly. According to the Gradian Fake drugs kill more than 250,000 children a year.

In 2008

29 fake products
75 countries

In 2018

95 fake products
113 countries

(Pfizer , 2019)

Introduction

Here at CARGON, we have devised a complete supply chain solution for pharmaceutical companies that lets each part of the supply chain production, distribution, wholesale, retail and consumer track each stage of every product. This would let the consumers verify the authenticity of their products and save millions of lives in the process. The process is as simple as scanning a single QR code and the user would have the whole life-cycle of the product that they're buying right in front of them.

Scope

The scope of this project is huge as it'll be widely available for everyone to use. Every part of the supply chain from production to consumers would be able to track the product that they're working with. Detecting authenticity of a drug is also something that's going to be used widely

Modules

Production Module

Lets the production zone maintain their inventory and manage future orders

Distribution Module

Lets the distributors track all the inventory that they're distributing to different vendors. Also lets them track riders

Wholesale Module

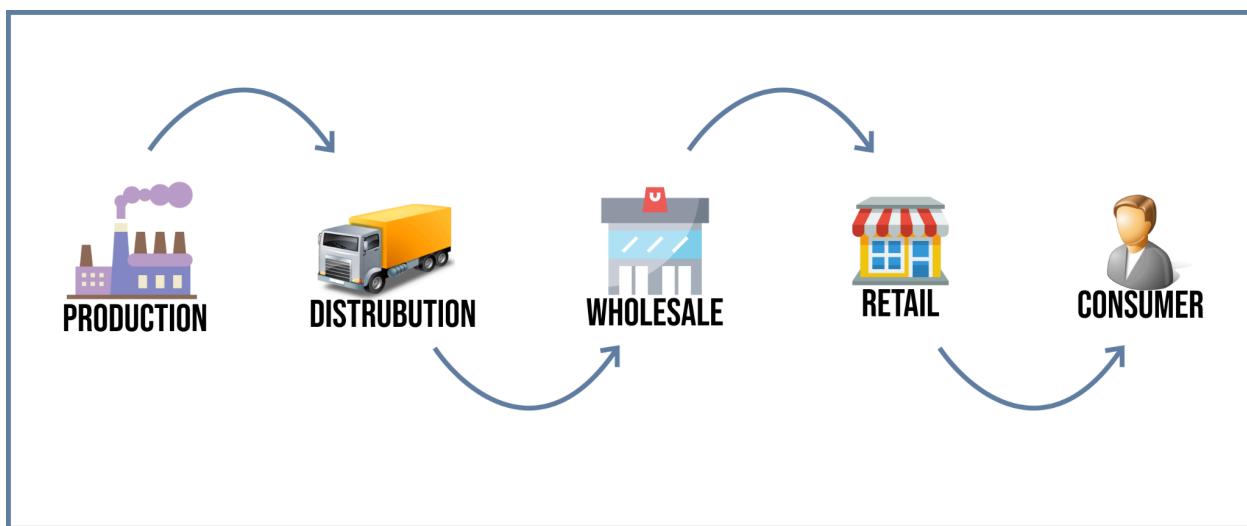
Lets the wholesalers maintain their inventory and order from factories

Retail Module

Lets the retailers maintain their inventory and order from nearest wholesaler

Consumer Module

Lets consumers directly order from the factory in bulk or track the life-cycle of a product



Use-Cases

Production Module

- Admin login portal
- Batch management portal
- Order management portal
- Inventory management portal
- Distributor management portal

Distribution Module

- Login portal
- Vehicle assignment
- Delivery tracking
- Condition monitoring

Wholesale Module

- Login portal
- Order management portal
- Inventory management portal

Retail Module

- Login portal
- Order management portal
- Inventory management portal

Consumer Module

- Online shop portal
- Profile portal
- Drug authentication portal

Proposed Technology Stack

Backend:

JAVA SpringBoot

Database:

Oracle

Authentication:

Firebase Auth

FrontEnd:

React JS

UI Library:

Material UI

Team Members

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