HackNSU Season 2

AMPHITETRIS

A smart approach towards collaborative economy

Prepared by

Tanjim Ahmed Khan

Sadat Shahriyar

Jayanta Sadhu

Department of CSE, BUET

Our idea is to build an online platform where garment factory owners and vendors can openly interact and do business.

Our website should provide subspaces to owners and vendors for conducting their business.

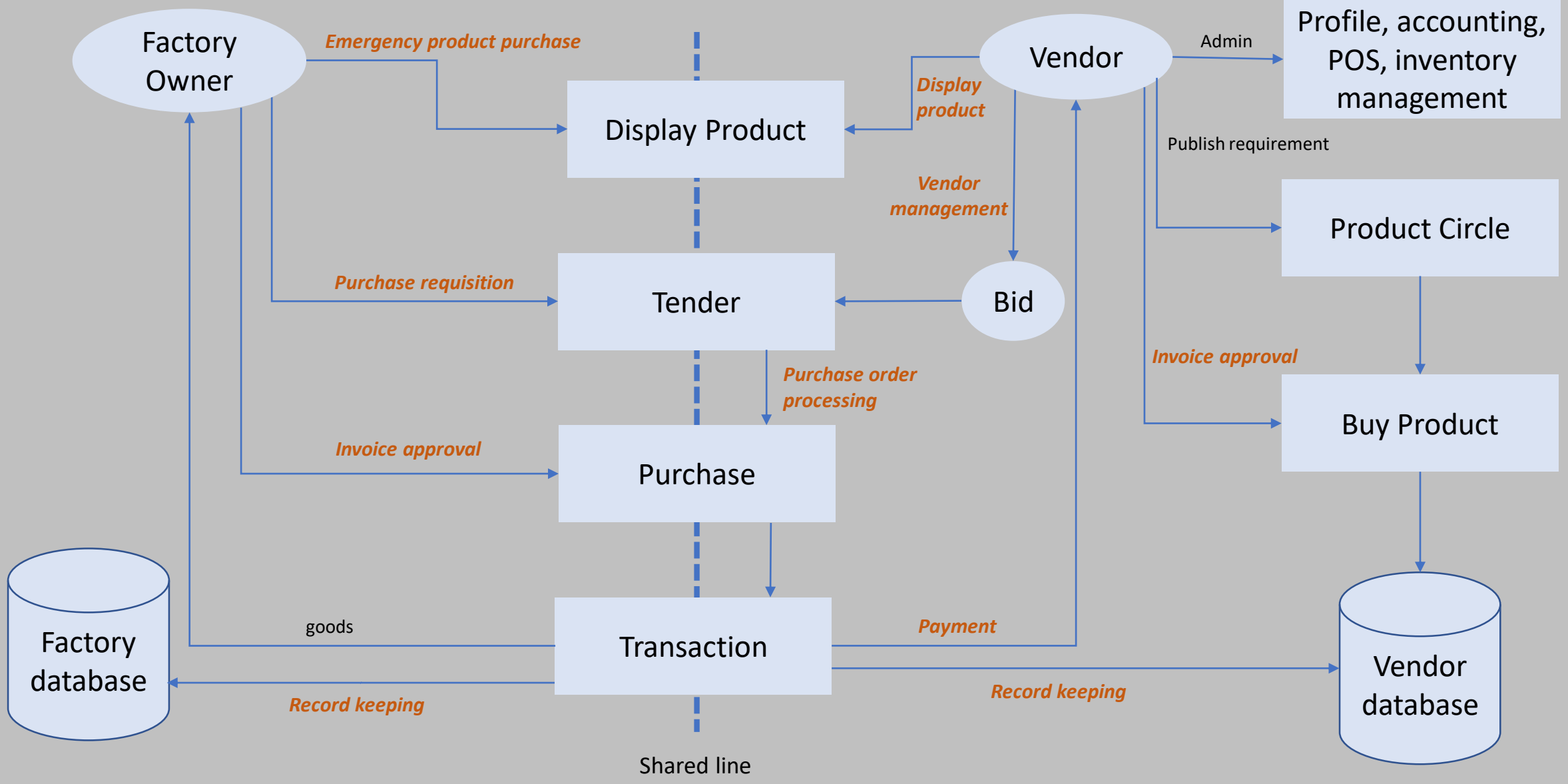
The factory owners will invite tenders on a shared platform where the vendors will bid for them. The process in between demand supply chain will be automated.

Owners will also have the option to directly buy raw materials from vendors.

The vendors can collaborate with themselves on the common sharing platform.

Automation on accountings and transactions will ensure fast and elegant solution.

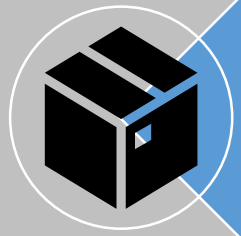
System Architecture of our platform



How can automation be done in these fields?

- Automation will be implemented primarily in procurement and inventory management.
- The shared inventory feature will be the backbone behind this automation.
- Inventory data and business logic will be used in the application layer of the website to create the automation system.

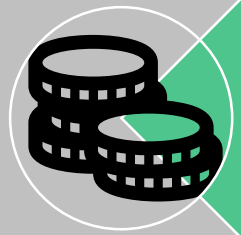
What's in it for vendors?



Smart Inventory Management System

Providing vendors with online accounting system in webspace

- Digital account ledger
- Real time inventory update based on vendor transaction



Quick and Digital Transaction

Faster POS management and secured monetary transaction

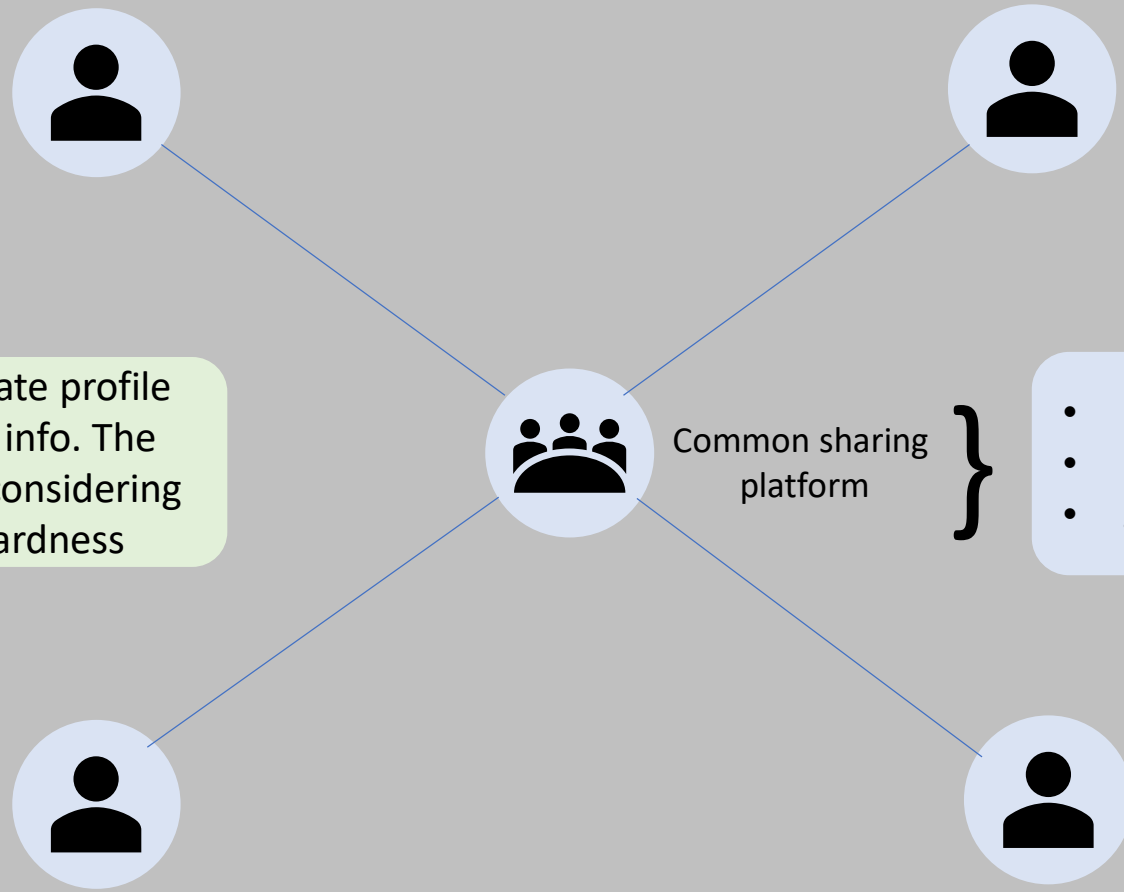
Automated accounting system

Vendors will be provided with software services that will ease their workload with auto documentation of purchase data, sales data and business flow data

Through these features vendors will get larger market scope and competitive environment.

Open Market Media

Digitally integrated communication system



The vendors just need to create profile and provide basic inventory info. The process will be user friendly considering their technological backwardness

Common sharing platform

- Product sharing
- Inter communication
- Showcasing current market condition

Our system will provide best sources in case of product shortage by using an intelligent algorithm to maximize profit considering source distance, availability and market price.

The platform will have a direct messaging system and automated sourcing system for shortage amount of products. Vendors can exchange goods among themselves and request for supply in case of emergency.

Procurement Process Automation

Market Finding

Market finding will be fast and reliable due to the accumulation of vendors into single platform.

Digital Purchase Order

Automation in bidding will ensure competitive market and steady price. Digitalizing purchasing procedure will lessen the hassle to a great extent and ensure transparency.

Online Invoice Approval

Invoice approval will be fast and handled systematically.

Fast Payment on Delivery

Digital transaction will speed up the delivery receiving big time. Funds will be quickly transferred through the system.

Procurement Data

Automated database update and analytics will ensure steady growth of company and ease the audit process.