PROJECT DESIGN PHASE-II

TECHNOLOGICAL ARCHITECTURE

Date	13 October 2022
Team id	PTN2022TMID33849
Project Name	Retail Store Stock Inventory Analytics
Maximum marks	4 marks

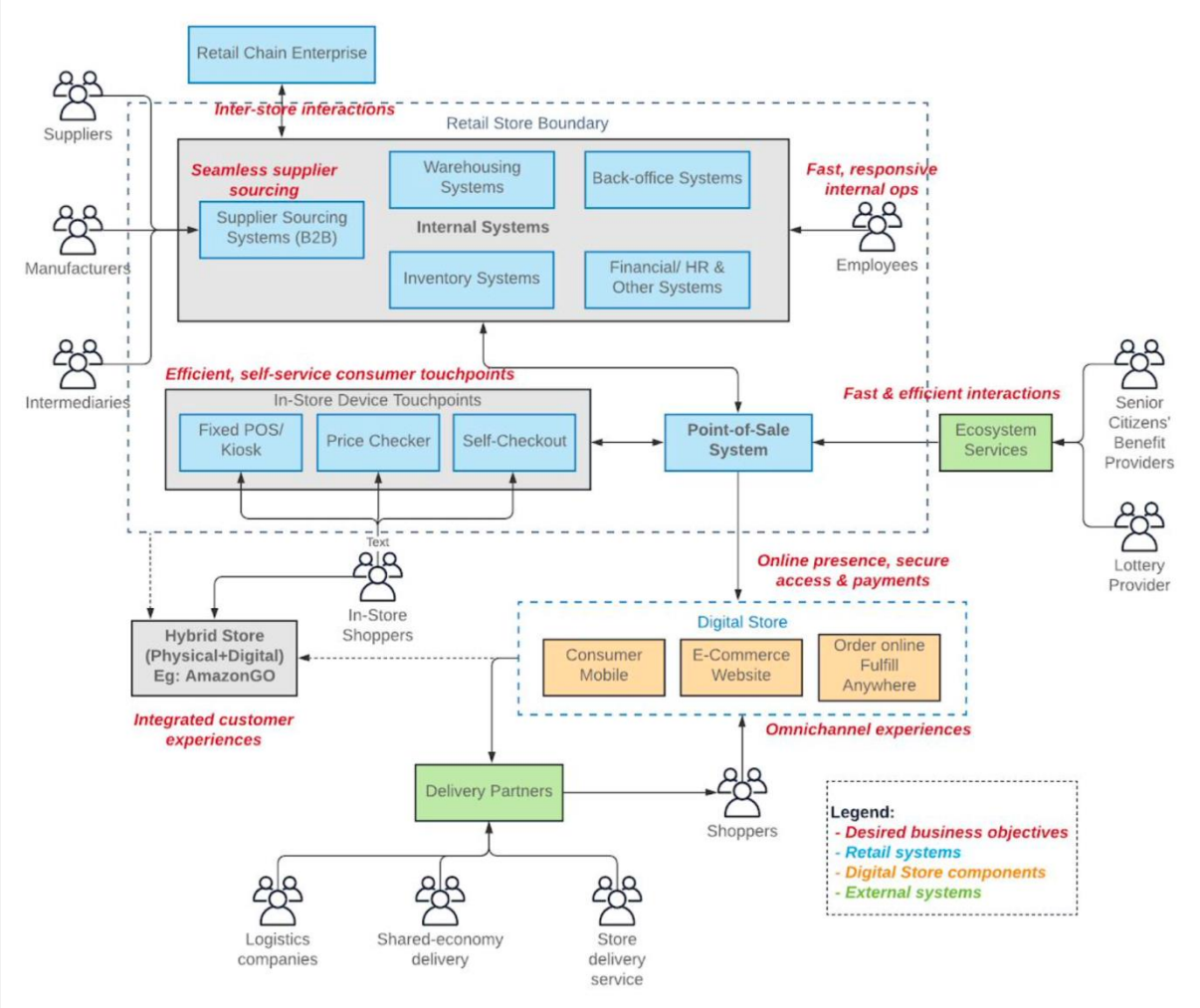

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	User Interface (GUI), Command Line Interface (CLI), Natural Language Interface (NLI), Menu-driven Interface and Form-based Interface	Ember JS Backbone JS, Vue JS, Angular JS, React JS, GUI, CLI
2.	Application Logic-1	Logical analysis of data (LAD) is a data analysis methodology which combines ideas and concepts from optimization and Boolean functions	Python
3.	Database	Data Type, Configurations etc.	MySQL, NoSQL, etc.
4.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
5.	External API-1	To have more storage and efficient working.	IBM Weather API, etc.
6.	Machine Learning Model	To understand data better	Object Recognition Model, etc.
7.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Apache kafka, MXnet,Pandas Matplotlib	Java and scala,python and c++, Python,Matlab.
2.	Security Implementations	Confidentiality, Integrity and availability Data masking, data ensure,backupstorage.	Encryption, Tokenization and Authorization
3.	Scalable Architecture	The measure of a system's ability to increase or decrease in performance and cost in response to change in application and system processing	Apps, Platforms or Programs That can grow and adapt with ease.
4.	Availability	If demand rises for certain lines, so should the stock availability for that product. If you fail to provide sufficient stock, especially with more seasonal products, you can and will lose customers. You can turn to category management and forecasting to help understand the rise and decline in demand for your products.	Warehouse maintaining for storing stocks.
5.	Performance	To measure performance in inventory management, one of the most common metrics to use is the **"**number of inventory turns." This number is calculated using the ratio of the value of purchased stock to the value of stock on hand.	Radio Frequency Identification (RFID) Technology.