

Retail recommendation system for unorganised small shop owners using AI/ML and blockchain

Theme: **“Supply chain event prediction and visibility”**: How can you provide visibility and predictive capabilities in the supply chain, in order to make the right decisions?



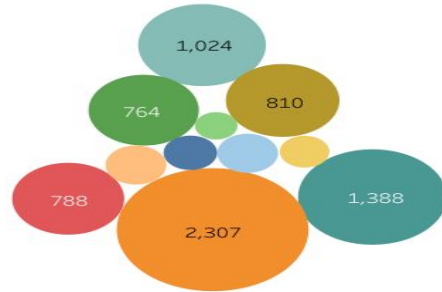


Project Idea

Creating a web app to recommend retailers the most preferred items in their home regions , predicting the profit margins they will generate after prioritising the recommended products using machine learning, data analysis and feedback collection of the entire ecosystem using blockchain technology

Data Analysis

Category - Count



Category

- Baby Care
- Bakery, Cakes & D..
- Beauty & Hygiene
- Beverages
- Cleaning & House..
- Eggs, Meat & Fish
- Foodgrains, Oil & ..
- Fruits & Vegetabl..
- Gourmet & World ..
- Kitchen, Garden & ..
- Snacks & Branded..

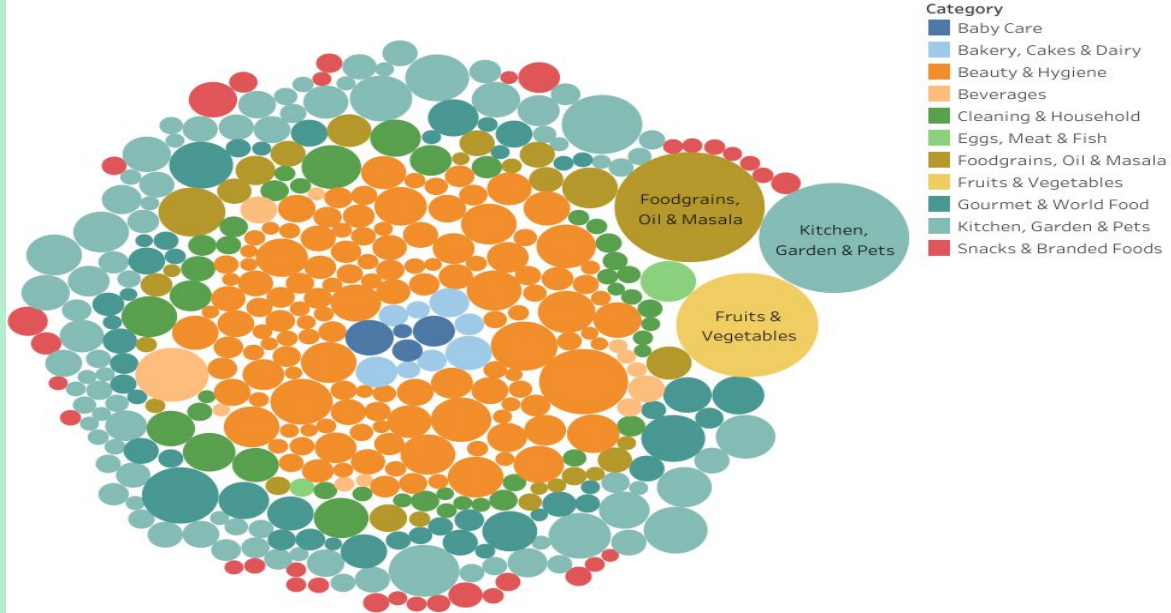
Profit Classification



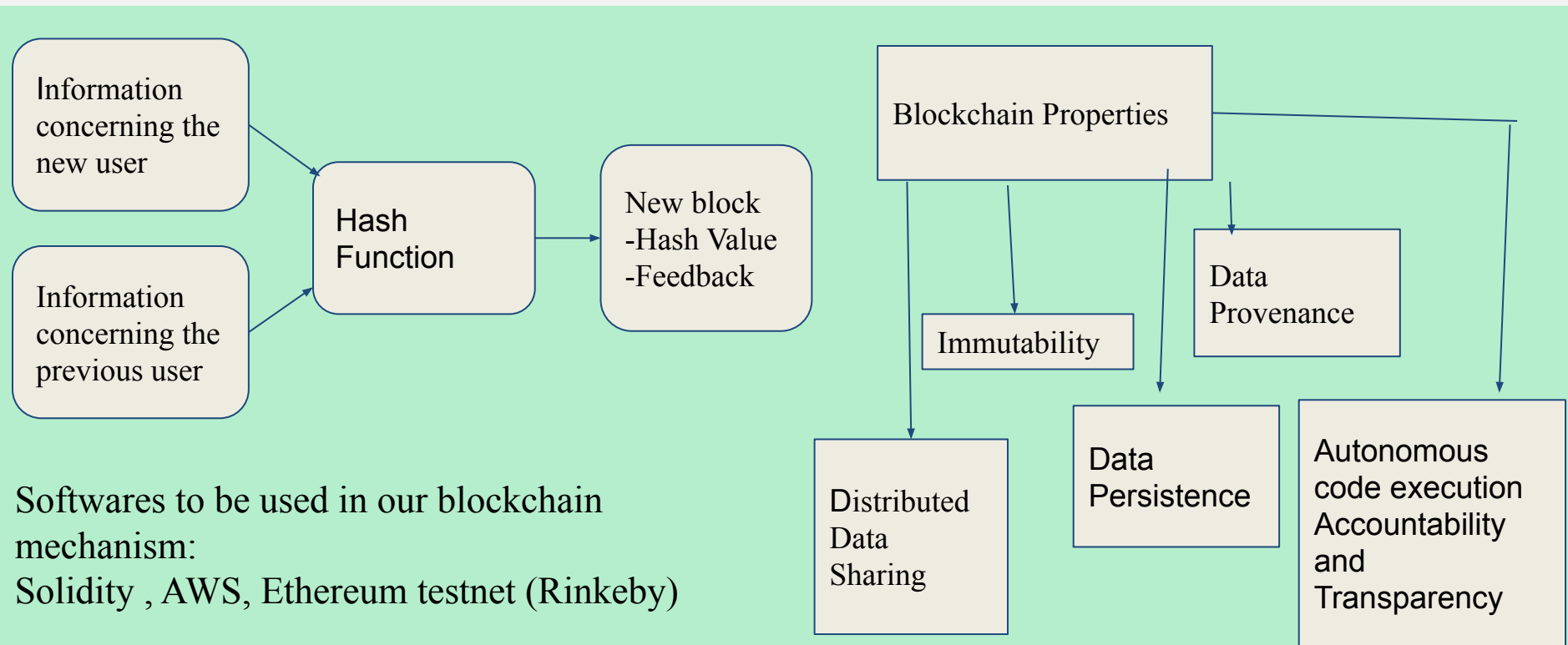
Data Analysis

Brand - Profit%

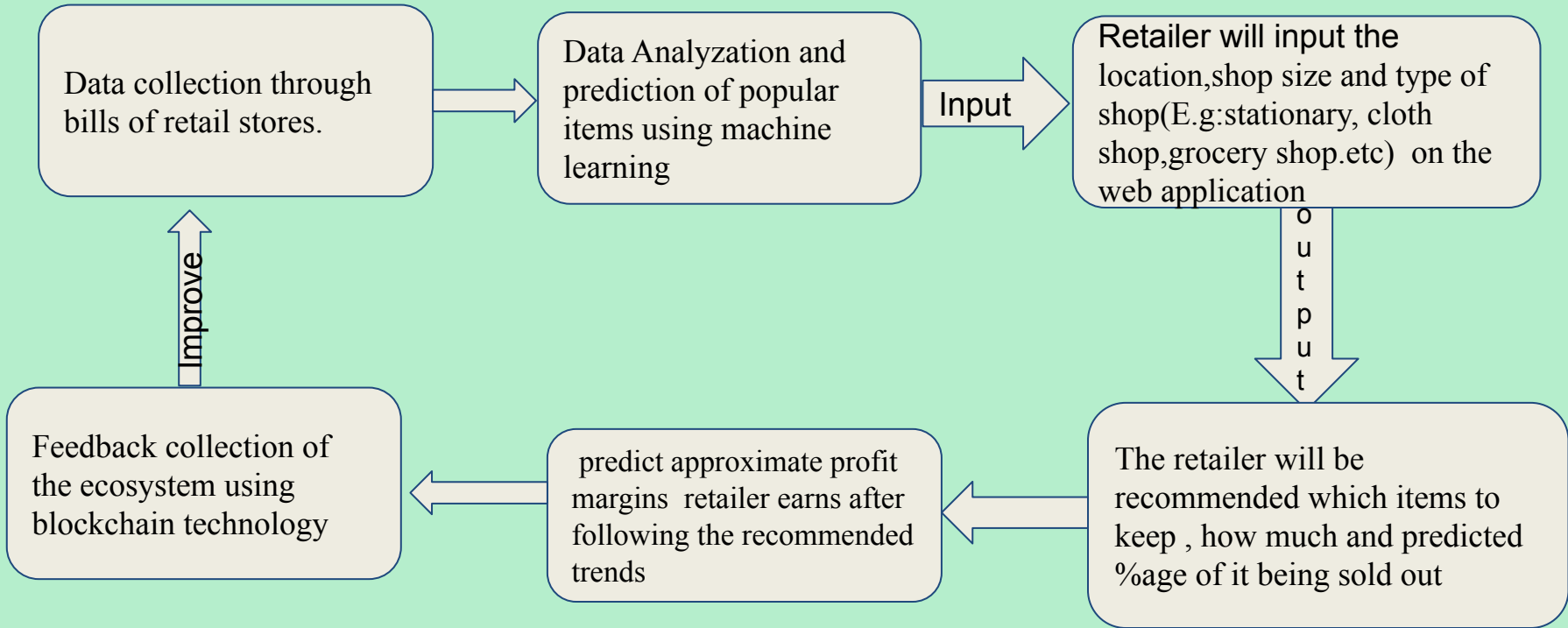
Each bubble represent the brand returning above 0.5% profit



Overview of Blockchain Mechanism



FlowChart



Project Potential

Will the idea deliver business value?

Our project is based on retailers, basically focusing on small shops and how to make things easier for them in the times of globalisation and immense competition in the market

Is the idea unique?

Our project idea basically focuses on profits to small shops and was crafted after a lot of discussion and reading. Currently there is nothing available to support small shop owners with their product recommendation and we strive to fill that void

Is the idea implementable?

The idea of our project is definitely implementable as we will collect data through bills of various retail stores and we will be able to predict which items or goods shopkeepers should keep and what exactly are the consumer trends in the region



Project description

- Data analyzation will be done through various bills of retail stores and we will be able to predict most popular items using machine learning
- The shopkeepers will use our web application and as input they will add location and type of shop they are running like pharmacy, grocery, cloth shop, shoe shop, etc. and the capacity of their shop.
- Our web application will be to give output as which item they should keep and how much % chances will those items will be sold. Our web application will also be able to predict the amount of profit they will be able to generate.
- This will help small shop owners and since india is a diverse country so we will have the interface available in at least 10 regional languages. Feedback collection maybe done implementing blockchain technology



Future Prospectus

In the future, we would be focusing on the data of the entire region.

The trends of each region would be compared using machine learning techniques

The product which is the most popular in that particular region will be recommended to the stores present in that region.





Thank You