

CRATES NAVIGATOR.

Innovated by;

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Area Of Innovation: Information Technology.

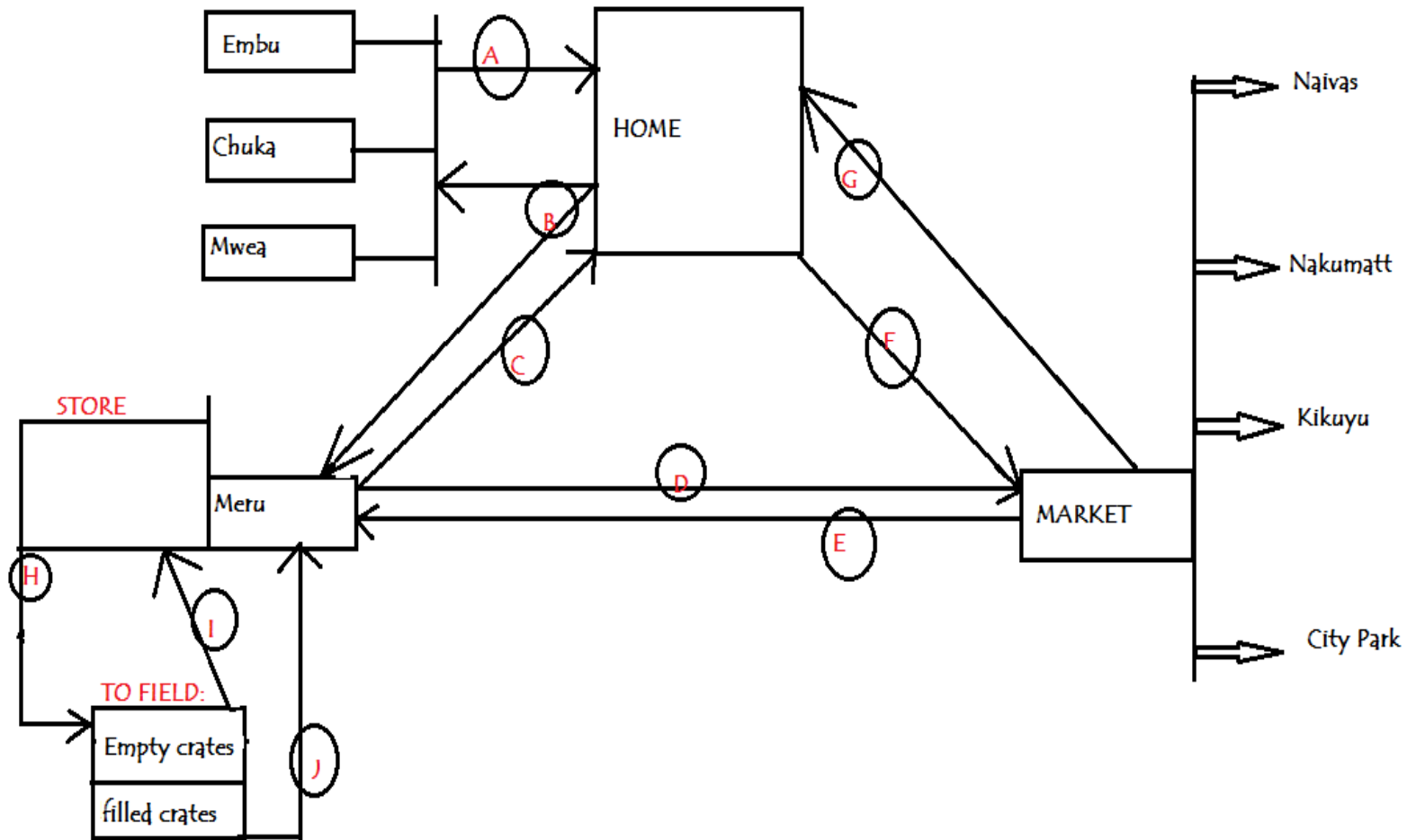
Introduction.

- Crates Navigator is a computer application that assists a firm or company in navigating through the entire process of crates distribution (crates that carry company's products) in and out of a company.
- It traces the movement of crates from one location to another, ensuring that the whereabouts of a crate(s) is known.

Movement of crates.

- Different companies have different policies or protocols that are followed when distributing crates.
- Our case scenario is of a Horticulture Farm that follows a system as illustrated by the diagram below.

Crates flow diagram



Implementing the flow diagram into an App.

Data Entry Points.

- Crates Navigator has designed user interfaces that allows the users of the system to record crates.
- It has several data entry points that are user friendly and easy to work with.
- Data entry point are as discussed below;

Data Entry Point 1: Crates Center

It has three entities;

- **Current Crates In Use.**

Allows the users to add new crate into the systems database.

- **Damaged crates.**

Enables users to record all company's crates that are damaged.

- **All company's crates.**

User is able to view all crates that a company owns. Includes crates in use, damaged crates and the lost ones.

Data Entry Point 2:Nairobi(Warehouse)

- This is the point of distribution. The warehouse distributes crates to various farms and it is on this interface where the user is in a position to record crates distributed to various farms.
- Also, it is at this point where the user gets to record crates brought back from the markets.

Data Entry Point 3:Farms(Embu, Mwea, Chuka & Meru)

This entry points are to be used by users in various farms.

This users at this location have the duties of;

- Recording crates received from the warehouse.
- Recording crates sent to the field for product collection and back.
- Recording crates sent back to the warehouse.

Store(Farms)

- After users in various farms have confirmed receiving of crates from the warehouse, Crates Navigator have a mechanism of showing all the crates in different farms at this point.

Data Entry Point 4:Farms(Received From Farms)

- Crates sent to the warehouse ones received should be recorded at this entry point.
- Users stationed in the warehouses records crates brought in from various farms.

Data Entry Point 5:Markets

- The crates brought in from the various farm are to be sent to the relevant markets.
- This entry point allows the user to be in a position to send crates to particular markets and keep a record of crate numbers and total summation of crates sent to the market.

Store(HOME and Markets)

- Crates Navigator uses this window as view point of crates in the warehouse and the crates in the market.
- It also shows the total summation of crates in the market and warehouse.

Total Not Yet Back

- Crates Navigator uses this window to display crates not brought back from markets and fields.
- If a crate exceeds a certain duration of time in the 'Total Not Yet Back' category it is deemed as a lost crate.

Lost Crates.

- Crates Navigator uses this window to calculate time of 'Not Yet Back' crates and determines if it exceeds the indicated time of stay.
- In other terms if a crate exceeds the set duration of time, it is recorded as a lost crate.
- It is also at this window where crates brought back and the ones not yet back are determined.

Administration of Crates Navigator.

- Since not all users have the permission to manipulate the database at every point, an administrator therefore is needed.
- The administrator adds new users to the systems setting limitations to access and manipulation of the database content.
- Refer to Admin menu in the system for more information.

Challenges addressed by Crates Navigator.

- Enhance transparency and accountability in the entire operation of crates distribution since time and name of person recording the crates is captured and also every one in the system is at liberty to view all data EXCEPT Admin's.
- Synchronize the entire operation of crate distribution amongst all warehouses, farms or stores since the database is shared. This harmonizes the entire operation.

Challenges cont'd.....

- Save time while counter-checking the record of crates as compared to doing it manually.
- Reduce the bulkiness of keeping books of record and the cost of buying the same books.
- Keeps an up-to-date record of crates currently in use. This can be used in avoiding shortage of crates in the near future.

Challenges cont'd.....

Depicts number of;

- Lost crates and location where a crate(s) was lost.
- Crate(s) not yet back from the various markets and the specific name of market.
- Crates in various warehouses, farms or stores. Whether empty or filled ones.

All the above can be generated by a one button click event.

Conclusion.

This innovation of Crates Navigator can be applied in several firms including;

- **Milk Processing company.**
- **Horticulture Farms.**
- **Bakeries.**
- **Soft drinks industries.**
- **Breweries.**
- **Kenchic.**

where products are packaged in small quantities.