Introduction:

We are working on this project to ensure the integrity of the information that stored on the RFID tag, knowing where the product in the warehouse and the identification of the quantity in time without the need for the work of the monthly inventory or semi-annual or annual. Therefore we have two problems:

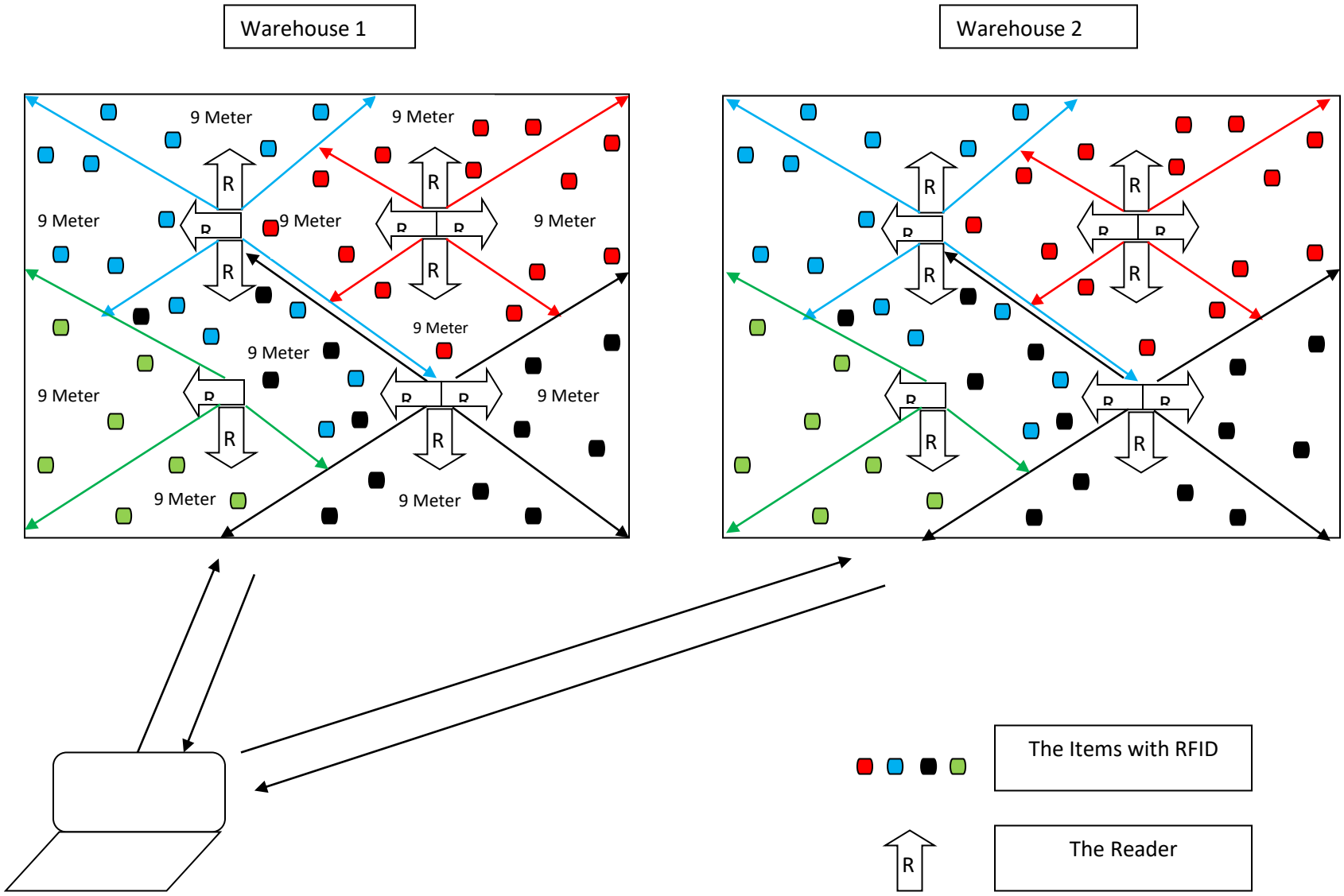
1- Preference Threat: A tag uniquely identifies the manufacture, the product type, and the object's unique identity. This shows the company preferences at a low cost. If the adversary can easily determine the item's monetary value, this threat can become a value threat.
2- Location Threat Users who carry RFID tags can be monitored and then their location revealed. A tagged object's location may be unauthorized disclosure without thinking of who is carrying it.

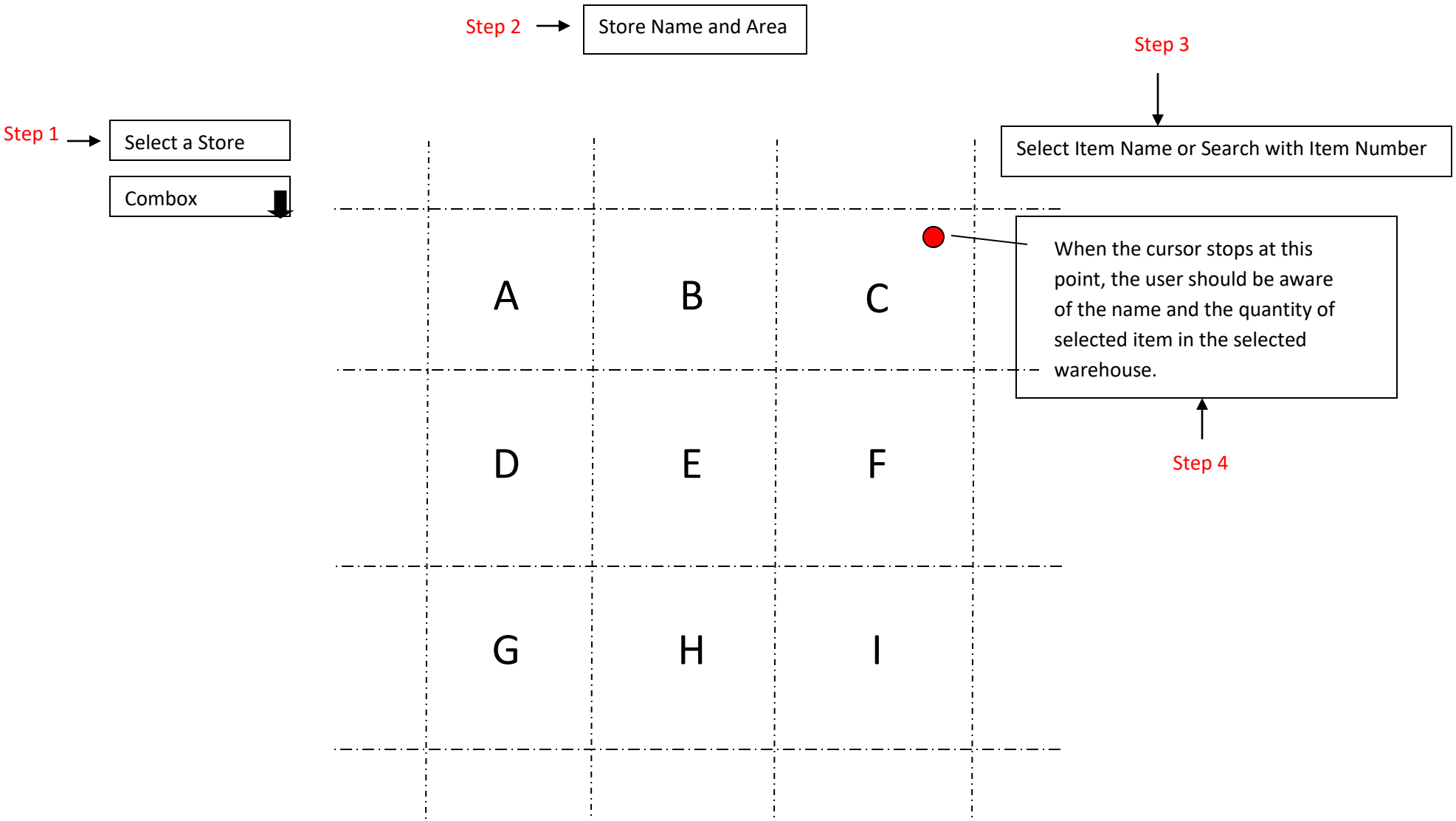
   Observation: to determine the tagged object's location we must first detect the RFID by a reader but the software of RFID Reader doesn't detect the RFID so we can't determine the locations of the tagged object's based on detection so we suggest the solution below that can overcome this problem.

Solution:

1- split and dissections the warehouse into large pieces then divided into small pieces then a smaller ....Example: Minya warehouse referred to the symbol X then large pieces X1 then small pieces X1A …..
2- Distribute the RFIDs for each encoded area in the warehouse to locate a specific area to specific RFID.
3- Distribute the RFIDs for each product in the warehouse to locate a specific tagged product's to specific RFID.
4- Design an application that able to read the collection of RFID to locate the area then locate the product id and its quantity as shown as below (figure 2).

Results to date:




Step 2
Store Name and Area
Step 3
Step 1
Select a Store
Select Item Name or Search with Item Number
Combox
A
B
C
When the cursor stops at this point, the user should be aware of the name and the quantity of selected item in the selected warehouse.
D
E
F
Step 4
G
H
I

Goal

Will the activation of this system is good?

What is the possibility of applying it to the warehouses?

The cost of system building is expensive or not?

Will the system save the time and effort throughout the year?

Methodology

The system consists of a group of tags and readers and designed application that connect with the readers to retrieve requested information from authentic users.

I contacted with a group of specialized companies like NXP's Company (Netherlands) with Eng. Ahmed Harb, Morpho's Company (France) with Eng. Ashraf Hussein, Masria Cards's Company (Egypt) and ontech's Company with Eng.Mohamed salama , Eng.Hosam and Eng.Mohamed Rashad.

Thus the cost of the system that can solve the problem above begins from 20,000 EGP to 35,000 EGP to buy some RFIDs, one RFID reader and application.

System components:

1- Set of REIDs
2- Set of REID Readers (long Range – Maximum 9 meter) at least one reader as Experiment
3- Encoding Unit
4- Server for each warehouse
5- Software Application to manage and connect with REID Readers.