

# ROOT CAUSE ANALYSIS

PROBLEM  
ISHIKAWA  
& WHY'S

## STORY TELL

1. PHARMACIST <sup>EXP</sup> [DIFFICULTIES] <sup>IN INVENTORY</sup> ~~IN INVENTORY~~  
IN TERMS OF PERFORMANCE INVENTORY IN MEDICINE.

2. PHARMACIST PERFORM <sup>EXPERIENCES ISSUES SUCH AS</sup> ~~MANUALLY~~  
~~WHICH RESULTS HUMAN ERROR~~ SUCH AS, EXPIRE  
MEDICINE NOT BEING DISPENSED, RACON KULANO JOBRA

3. INVENTORY IS BEING DONE MANUALLY  
IT IS PRONE TO HUMAN ERROR.

4. ~~ALTHOUGH~~ ~~HOWEVER~~ THESE ISSUES ~~ARE~~ SOLVED  
BY IMPLEMENTING PROGRAMS OR SYSTEM AUTOMATION  
INVENTORY. HOWEVER THESE SYSTEM ARE SOP  
NOT PERFECT.

Limitation:  
IMPT. OF PRECISION INVENTORY

& FORECASTING

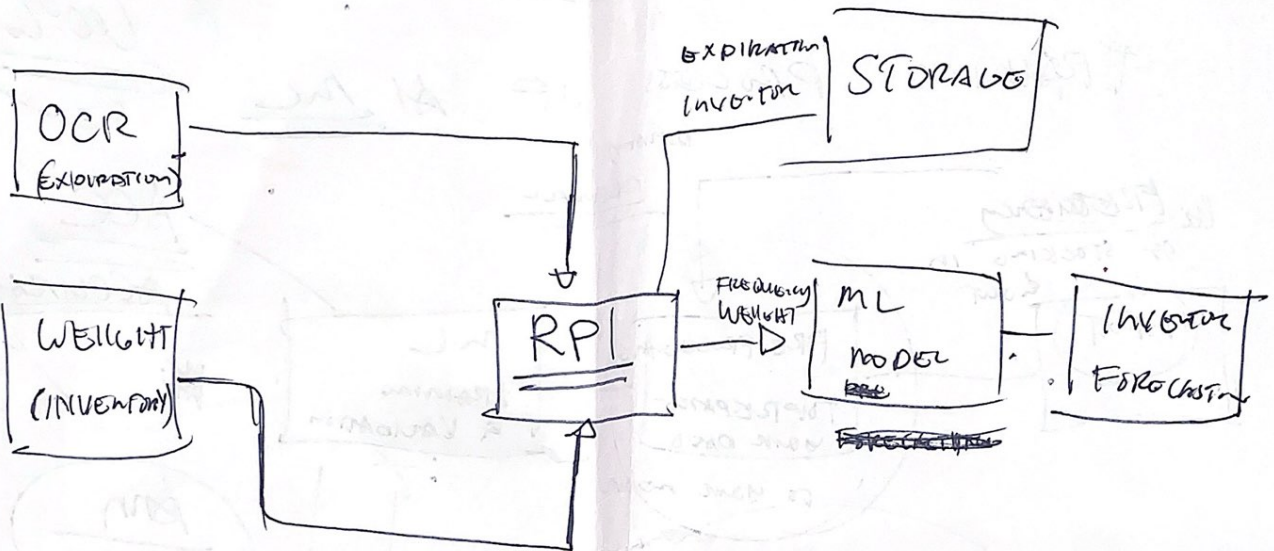
5. TITLE

WHICH IS WHY THE GOAL OF  
THIS RESEARCH IS TO DESIGN  
~~AN~~ MEDICINE D.

Implementation  
of AI in  
Inventory  
management  
Expiration

PAUL

theory  
CONCEPT OF THE STUDY





PREDICT  
DISPENSED  
MEDICINE

MEDICINE INVENTORY, PACKAGING &  
EXPIRATION

ML FOR FORECASTING

FILE

metrics

MMS

RMS

MMS

EL SUM

PERCENTAGE

EXPIRATION  
USING

SCN - NLD

mm/dd/yyyy

mm/dd/yyyy

MEASURABLE

CLAIM: ML CAN BE USED  
FOR INVENTORY FORECASTING  
: > 90%

1.) DETERMINE THE ACCURACY OF THE  
MACHINE LEARNING ALGORITHM.

2.) DETERMINE THE PERFORMING CLASSIFICATION OF THE  
ML

IN TERMS:

ACCURACY

F1-SCORE ✓

PRECISION ✓

RECALL ✓

MAPE - MAE - RMSE

MEAN AVERAGE

PERCENTAGE ERROR

3.) DETERMINE THE ACTUAL PREDICTION ACCURACY  
OF THE MODEL BY COMPARING WITH THE  
ACTUAL REMAINING SUPPLY USING THE TRADITIONAL  
IN TERMS OF:

MAPE

MAE

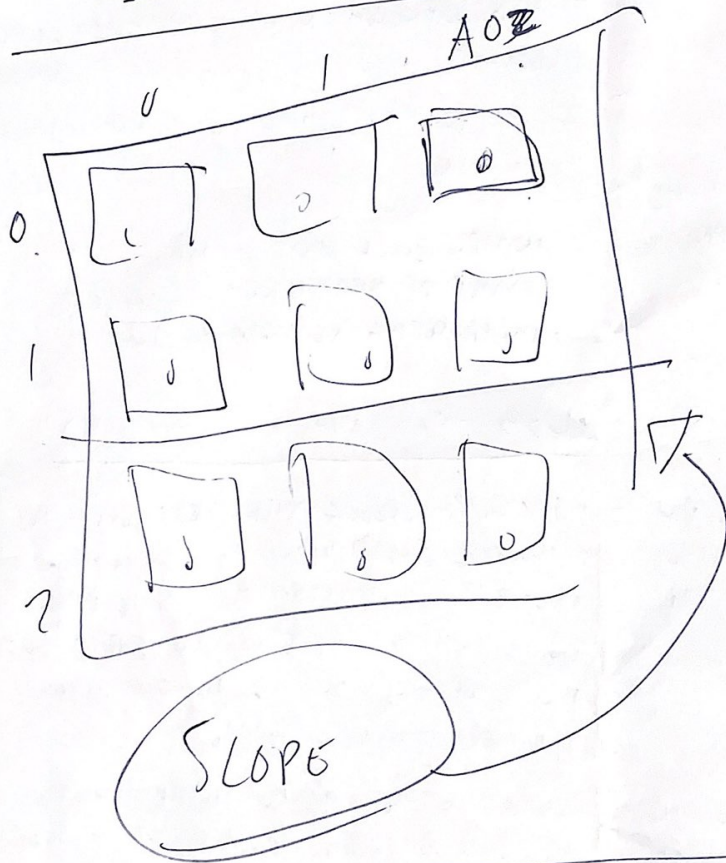
RMSE

4.) DETERMINE THE SECURITY & RELIABILITY OF  
THE OCR MODULE &  
FOR EXPIRATION CHECKING  
WEIGHT SENSOR

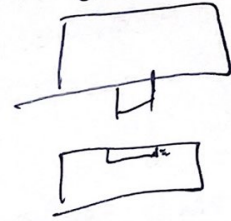


EXISTING

COZ  
BOZ  
AOZ



GCR



~~MEDICINE DRUG INVENTORY MAINTAINING WITH EXPIRATION CHECKING~~

MEDICINE DRUG INVENTORY FORECASTING WITH EXPIRATION CHECKING using MACHINE LEARNING