ICM INDUSTRIES
WAREHOUSE FACILITY PLAN

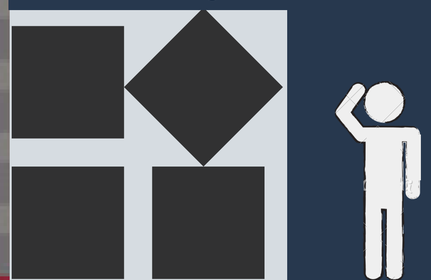
1 BACKGROUND

ICM Industries, based in Midrand, imports and exports agricultural and industrial machinery. These products are sold in the office and stored in the warehouse, however, the company is growing exponentially causing storing problems within the warehouse.

2 PROBLEM

The warehouse:

- Lack of space, products are placed arbitrarily
- Undistinguishable products and quantities
- Order picking process is time-consuming
- No stock list available
- Loss of sale and occurrences of theft
- Poor shelving



3 PROJECT AIM

To plan and design a layout for ICM's warehouse by effectively utilising space, equipment and labour and satisfying the requirements of a warehouse by ensuring it is optimal, systematic, environmentally friendly, safe, organised and an efficient way for the keeping of stock.

4 PROJECT APPROACH

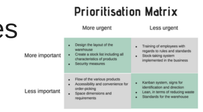
Industrial techniques were researched and investigated on creating a successful and spacious warehouse facility plan. Various concept designs were compared and evaluated to find the design that best meets the requirements of the employer and achieves the aim of the project.

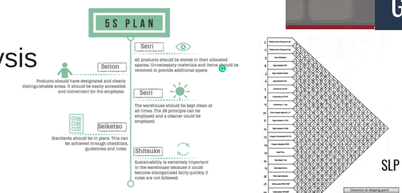
5 DESIGN MODEL

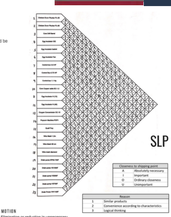
The layout was designed with Chief Architect, where it distinguished the placement of every product type and created a systematic, organised, safe and healthy work environment that is convenient for the employer, employee and in turn the customer. The design was used in conjunction with the stock list that was produced and listed on Microsoft Excel and then imported into Quickbooks, to be used as ICM's newly implemented stock-taking system.

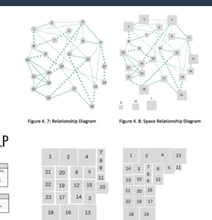
The final design was chosen using:

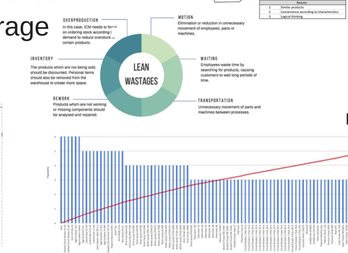
- Planning techniques
- ABC Analysis
- Systematic Layout Planning
- Pareto Analysis
- Lean
- Kanban
- 5S plan
- Warehouse standards
- Shelving and storage techniques

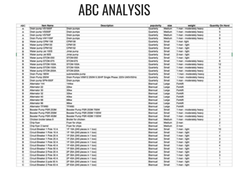


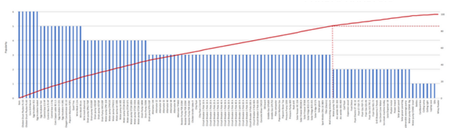


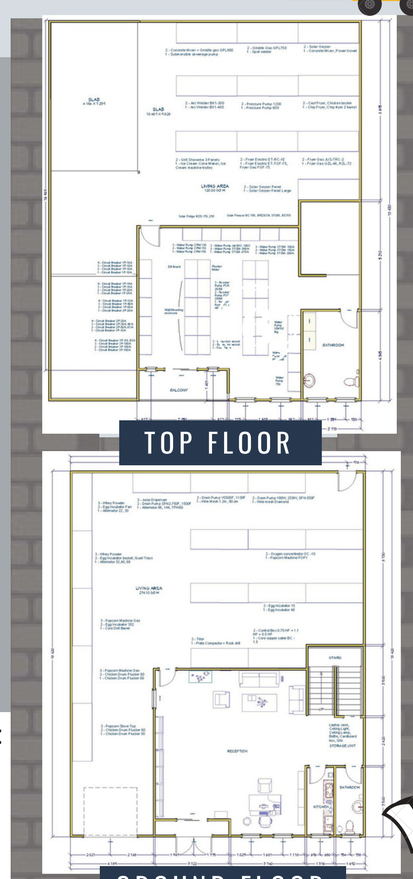




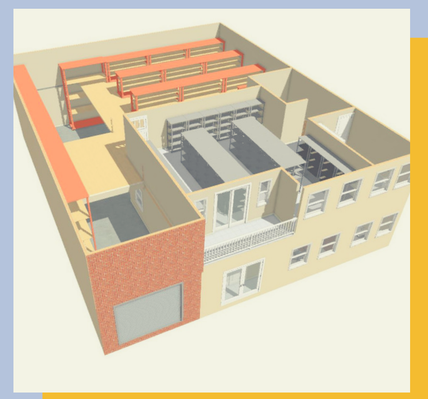








NOW HAS A STOCK-TAKING SYSTEM ON QUICKBOOKS AND AN OPTIMISED AND SYSTEMATIC LAYOUT PLAN.



6 DESIGN VALIDATION

Validation testing was followed through Unit Testing, Integration Testing, System Testing and User Acceptance Testing. This included surveys, a time study of the effect of the new layout compared to the old and a budget to ensure the project was completed at a reasonable price.

Nika Ashoori u15009484 2018