



NEW PRODUCT DEVELOPMENT ON HI-TECH SMART SHOE RACK

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*Very practical
having more
real experience
for own work*

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1.0 EXECUTIVE SUMMARY

New Product Development is defined as the process by which entrepreneur designs and creates new product or service that will be sold to customers. Based on the idea of improving shoe rack available in the store room of shoe shop, the team will propose an idea to create new product or service that will satisfy the users and improve the quality.

From the interview, the team analyse that workers of shop shoes complain that sometimes they fell down during manual picking using a stair to select customer shoes. Besides, from our observation, there is limited space for stock of shoe to fill on the rack. Another limitation found was the racks available were too high and unstable due to material used to build the racks.

To ensure the problem can be solved, the team will come out with a redevelopment of new rack shoe which is more convenience to the workers. The rack shoe will be linked with smart app that combine with QR code to scan for picking the shoe. The concept of the rack shoe is similar like vending machine where the shoes will come out from the bottom of the rack shoe.

So that, we are focusing on New Product Development (NPD) with classifying the NPD into research and development, product design and features, concept testing, build the 2D prototype, test marketing. In a nutshell, the team hope that the NPD performance will enhance the new idea of rack shoe that satisfy the customers well.

2.0 INTRODUCTION

Storage room is a compulsory to shops or stores that contains many stocks and this includes shoe store. Currently, storage room development is at stagnant state as it already reached its mature point. Basic storage room facility include racks, shelves and accessories prerequisite to hang or place the products such as hangers and boxes. Problems arise as soon as the products are stocked beyond the containers can contain in example, small racks or insufficient hanging place. Therefore, one solution must be made for this critical problem as this problem can cause damage to the staff, the store and the products.

3.0 TECHNOLOGY DESCRIPTION

The high technology smart shoe rack is a smart machine that works like vending machine. Figure 1 shows the rack has built in LED light to give clear vision of the shoes in the rack. It has alarm system in case of any failure it will notify the user and then it can be operated manually until the maintenance team identify and repair the problem. The technology comes with QR code system where all the display shoes have QR code as shown in Figure 2. The QR code then can be scan using the application that the team create as in Figure 3 and it will connect wirelessly with the high technology rack and push the shoes.

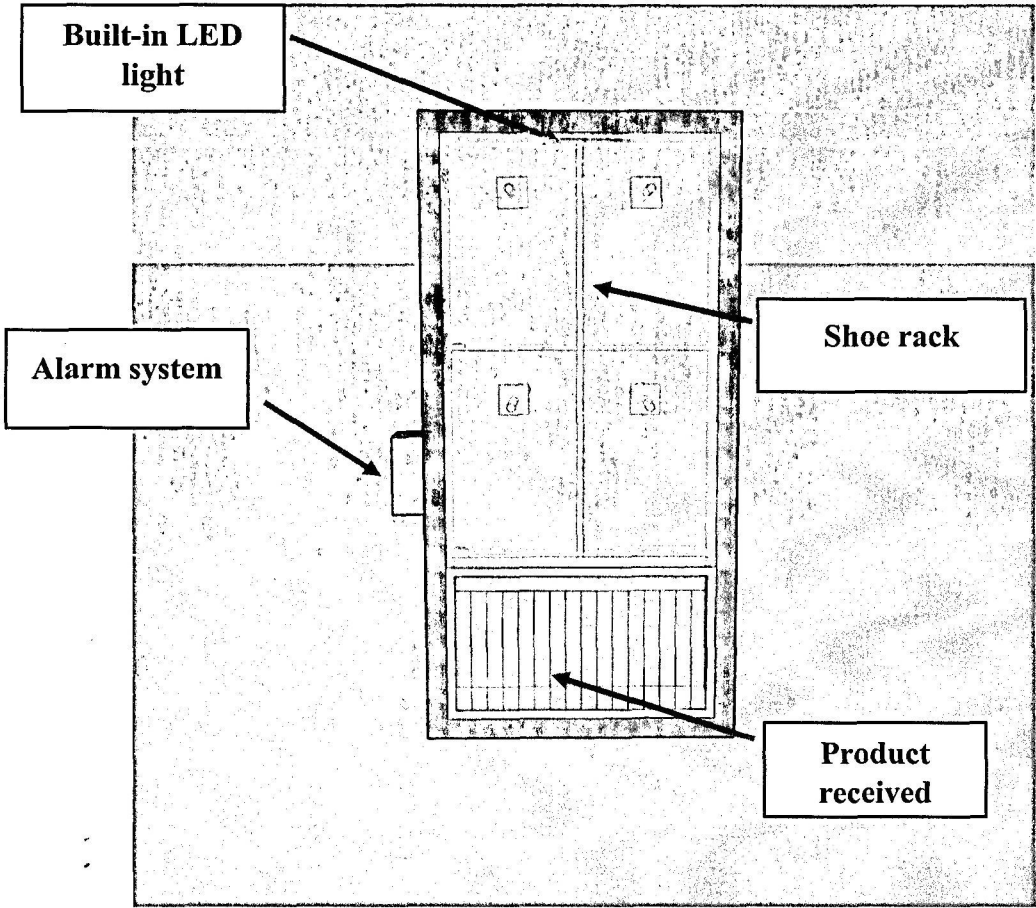


Figure 1: High Technology Shoe Rack (Vending Machine concept)



Figure 2: Shoes with QR code tag.