

## SMART SHOOPING TROLLEY

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### ABSTRACT

It is wireless techniques along with one more communication technology has helped in making electronic commerce very popular. In this paper we discuss on concept of “Smart shopping Trolley used in commercial complex which many individual retail stores”. The main purpose here is to assist a person in shopping smart human following shopping trolleys. Shopping malls are one of the most popular places for leisure activities, shopping, and entertainment, which attract a large number of people every day. With the increasing popularity of online shopping, brick-and-mortar stores have faced challenges to retain customers. As a result, shopping malls have been looking for innovative ways to provide a more personalized shopping experience to attract and retain customers. One such solution is smart human following shopping trolleys.

### I. INTRODUCTION

Smart human following shopping trolleys are designed to follow customers automatically, eliminating the need for them to push the cart manually. This technology offers convenience and ease for shoppers, allowing them to focus on shopping and enjoying their experience. The smart trolley is equipped with various sensors and Bluetooth that can detect the customer’s location and follow them while they shop.

One of the primary advantages of smart human following shopping trolleys is that they provide a more personalized shopping experience. Shoppers can easily navigate through the store without the need to push their trolley or worry about losing it. They can focus on the products they want to purchase and spend more time browsing without any hassle.

### II. METHODOLOGY

**1. Requirements Gathering:** The first step in the methodology is to gather the requirements for the system. This will involve identifying the key features and functionalities that the system must have, as well as the user requirements and constraints.

**2. Design:** The next step is to design the system architecture and user interface. This will involve creating wireframes, mockups, and prototypes to test the system's usability and functionality.

**3. Deployment:** The final step is to deploy the system to the canteen's infrastructure. This will involve configuring the system, training the staff on how to use the system, and monitoring the system for any issues or bugs.

### III. MODELING AND ANALYSIS

The robot can move along the line for easy navigation along the shopping racks lane. The robotic vehicle also has an ultrasonic sensor mounted towards the front of the robot. The sensor is used to detect the distance between the user and the robot. The robot keeps following the customer at certain distance as customer moves through the shopping lane. Thus the system puts forth a smart shopping trolley for modern shopping malls.

### IV. APPLICATION

- Smart Shopping Trolley is use in malls.
- Smart Shopping Trolley is use in samall shops, D-MART etc....

### V. CONCLUSION

In conclusion, smart human following shopping trolleys are a promising solution for shopping malls looking to provide a more personalized and efficient shopping experience for their customers. With this technology, shoppers can enjoy a hassle-free shopping experience, and shopping malls can differentiate themselves from their competitors, attract more customers and retain them in the long run.

## VI. REFERENCES

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