Ralphs Grocery Company

5241 Warner Ave

Huntington Beach, CA 92649

**Dear Ralphs:**

**Situation:** Customers often spend more time at Ralph’s self-checkout than they do in normal checkout lanes due to unfamiliarity with the system, inexperience with general computing technology, and stark differences from their traditional shopping experience. Typically, an employee is there to guide the shopper through checking out. With self-checkout, they lack that guiding hand and often struggle, leading to massive congestions and lines that fill out of the self-checkout area and into normal customer traffic lanes. However, self-checkout is the future; it allows shoppers to get in and out quickly and Ralphs to save on labor.

**Proposed Solution:** All lanes could easily be designed to mimic normal checkout without the need of a bagger or cashier and cut down on waiting times. Replacing the cashier with one of our patented robots would intuitively guide the customer through the process like a normal cashier, track item purchases, and accept payment, allowing even the most technologically inept customers to get through the process quickly. Our computer queue simulation would optimize this process and find the optimal amount of lanes and robots to guarantee waiting times never congest the store.

**Steps Involved:**

1. Run simulations to determine the number of lanes needed.
2. Redesign checkout stations to accommodate the robots.
3. Program the existing computer system to communicate scanning and payment information to the robot.
4. Monitor traffic and waiting times, adding/removing lanes (and effectively robots) as necessary.

**Benefits:**

* Robots would eliminate customer confusion and provide a quick, painless process.
* Customers would spend less time talking to cashiers.
* Robots, not having human error, would allow customers to check out more items at once and quicker.
* Traffic jams near the entrances/exits would be significantly reduced.
* Natural disasters like pandemics would not cripple stores.

**Potential Obstacles:**

* The cost of converting lanes and adding robots would be hefty. This cost would be offset in as short as a month by being able to transition employees to part-time or lay them off.
* Lanes to implement this system would worsen existing problem in the short term. This could easily be alleviated by upgrading each lane one-by-one.
* Some (particularly older) customers may boycott the store to avoid interacting with robots. Keeping one attendant employed would allow us to effectively deal with these customers.

We hope you can see how dramatically our system would help cut down on store traffic, dramatically eliminating lines in a time where waiting is a danger to both society and your customers.

Kind Regards,

Jack Vento

CEO, The Vento Group