Austin Moore

CSD380 – DevOps

Module 5.2 Assignment

**A diagram of a car

Description automatically generatedValue Stream Map**

**Estimated Average Flow Time**

|  |  |
| --- | --- |
| Realizing need for groceries | < 1 Minute |
| Evaluation of groceries | 10 Minutes |
| Grocery list | 10 Minutes |
| Drive to store | 15 Minutes |
| Shop | 60 Minutes |
| Checkout | 15 Minutes |
| Drive home | 15 Minutes |
| Unload groceries | 10 Minutes |
| Put away groceries | 15 Minutes |

**Estimated Cycle Time:** 2.5 hours

**Optimizing Routines**

* When evaluating the groceries, you can make the list at the same time which may save you around 5 minutes or so versus evaluating all the groceries you have, then going back and making a list.
* Driving to the store can vary depending on the time of the day and how much traffic you have. Ideally you would plan in the middle of the day or very early or late so you can avoid traffic which may save you 5 minutes each direction.
* When shopping, you can make sure your list is in order based on the layout of the store, so you efficiently go from one side to the other without ever having to back track. Doing this could save you 15 minutes of time.
* The checkout process can take longer if you have to wait for an employee to check you out versus going through self-checkout. Going through self-checkout could save you up to 10 minutes depending on how many groceries you have and how long the lines are at the store.
* Unloading and putting the groceries away currently takes around 25 minutes. You could put them away as you unload them versus unloading all of them and then putting them away. This may only save a couple of minutes in the process.
  + If you do self-checkout, you could efficiently bag your groceries to create more efficiency once you put them away. For example, you could put all refrigerator items together in 1 bag, frozen items in another, and pantry items in a third bag. This way when you go to put them away, you have sped up your unload and put away process which could save you 10 minutes in that process.

**Updated Cycle Time:** *1.6 hours*

* Overall, you can shave off almost a full hour of your time by evaluating and setting up a good routine for grocery shopping.