

## MIS 2100 Homework 1

Daniel Ludwig A02220549

1.

- a. **Kayak Type:** *ModelName, BasePrice, ExpFrStor, SideStor, Anchor, BaitTank, CupHoldL, CupHoldR, GlassBot, LuxSeat, SportCluster, RodHolder, Chrome, FlagHolder, UnderCarr, DragHand, DeckRig, EPaddle, Headlight.*
- b. **Kayak Sales:** *TotalSale, SalesCenter, SalesCtrHelpful, SalesCtrRec, SaleDate, InvoiceNo.*
- c. **Customer Info:** *CustID, State, Gender, DOB, MaritalStatus, Children, Income, Political, FishLicense.*

2.

One issue found in the data is completeness. Not all the data is completely filled out on the personal info for the customers. This will affect the statistics of the customers on who is most likely to purchase what type of kayak, which area sells which kayak the best, who gets which additional features etc.

3.

**State** – This can help determine which state is having the most purchases of kayaks.

**Gender** – This can help determine if males or females are more likely to purchase a kayak.

**DOB** – This helps determine which age group of people are more likely to purchase a kayak. Also, if they purchase a kayak when younger, they may purchase another one in the future if they are satisfied with the product.

**Marital Status** – Using this can help determine if people are more likely to purchase a kayak if married or single. Also, do married customers purchase one for each partner or not?

**Children** – This can help determine if the number of children people have had any effect on if they buy a kayak or not. Also, if a parent purchases a kayak the child is then exposed to it and may decide to purchase one in the future for themselves.

**Income** – Are people with higher incomes more likely to purchase a kayak? Or vice versa?

**Political** – Are the kayaks more popular among a certain political group, or not?

**Fish License** – Are people with a fishing license more likely to purchase a kayak than one who doesn't have one?

4.

What is the most popular kayak additions?

- a. ExpFrStor, SideStor, Anchor, BaitTank, CupHoldL, CupHoldR, GlassBot, LuxSeat, SportCluster, RodHolder, Chrome, FlagHolder, UnderCarr, DragHand, DeckRig, EPaddle, Headlight.
- b. Are there some additional parts that are used so rarely that it could be in the company's interest to stop offering that part? Are there some additional parts that are so common that they might just want to offer that additional part standard? What parts do they

need to stock up on, and which ones can they wait on for getting another shipment of them?

- c. Color of kayak. If there are multiple colors of kayaks, then which colors are most popular?

Which areas are most popular with the company's kayaks?

- a. State, Sales Center.
- b. This will be helpful to know if a state is very popular with the kayaks. If so, the company may consider adding in an additional sales center in that state, or expand the existing sales center.
- c. Whether the people purchasing are from a rural or urban area. This helps narrow down the area a little more to discover a little more about the people who purchase the kayaks so they can target the more popular customers.

Are people with a higher income more likely to spend more on the more expensive model of kayak and if they spend more on adding parts to a kayak than someone who's income is lower?

- a. Income, Model Name, Base Price, Total Sale, ExpFrStor, SideStor, Anchor, BaitTank, CupHoldL, CupHoldR, GlassBot, LuxSeat, SportCluster, RodHolder, Chrome, FlagHolder, UnderCarr, DragHand, DeckRig, EPaddle, Headlight.
- b. If people with higher income are more likely to spend more money on the kayaks, then the company may consider focusing more advertising towards the upper class.
- c. Occupations. Occupations are a determining factor on how much someone gets paid. Knowing this could tell the company if there is a certain high paying occupation that is more likely to purchase the kayak than other jobs. If so this could also help narrow down targeted marketing.