## Starbucks case study

Business

## ASSIGN BUSTER

SUBJECT: Case Problem -StarbucksProblem Statement It was November of 2001 when Starbucks first started its prepaid debit cards. This debit card can hold anywhere between $\$ 5$ and $\$ 500$ and can be used at any Starbucks location.

In 2002, there was a $7 \%$ same store increase in sales and its believed that the card was the reason for the increase. Starbucks wants to be able to profile frequent visitors to a Starbucks store. The following information used in doing so includes age, income, and number of cups of coffee per day. Statistical Results We first take a look at the analysis of variance and compare our $p$-value with our alpha value. With an alpha value of .

05 we can see that our p-value is less than our alpha in which case we chose to reject our null hypothesis. By rejecting our null hypothesis we are saying that at least one of the independent variables is adding significant predictability for y . From here we take a further look and examine each predictor variable individually by comparing our alpha to each $p$-value. For age our $p$-value is . 358 which is greater than our alpha so we chose to drop age from our model.

We then compare the $p$-value for income of . 174 and decipher that again that value is greater than our alpha and we chose to drop this variable from our model. Next, we examine our last variable, cups. We see that is has an alpha of . 003 and is smaller than our alpha, meaning that it does have predictive power, so we chose to keep this variable.

So, to best profile frequent visitors to a Starbucks store using number of cups of coffee per day is the best predictor. The implications from this model
would go to show that both age and income don't play a significant role in the frequency of visits a person makes to a Starbucks store, but rather the number of drinks an individual consumes per day. Conclusion Starbucks was interested in being able to profile frequent visitors to a Starbucks store. The predictors they were interested in using were age, income, and number of cups per day. After having ran a regression analysis and examining each predictor individually, I was then able to determine which predictors where insignificant and then dropping them.

I determined that the only significant variable in predicting frequent visitors was number of cups per day. Appedices: Regression Analysis: Days versus Age, Income, Cups The regression equation is Days $=5.97-0.0785$ Age + 0.716 Income +1 .

06 Cups Predictor Coef SE Coef T P Constant 5. 968 3. 065 1. 950.065 Age 0.078530.

08352 -0. 94 0. 358 Income 0. 071610.050911.

41 0. 174 Cups 1. 06440.3127 3. 400.
$003 \mathrm{~S}=3.27909 \mathrm{R}-\mathrm{Sq}=41.6 \% \mathrm{R}-\mathrm{Sq}(\mathrm{adj})=33.2 \%$ Analysis of Variance Source DF SS MS F P Regression 3 160. 7653.

59 4. 98 0. 009 Residual Error 21 225. 80 10. 75 Total 24386.56

