

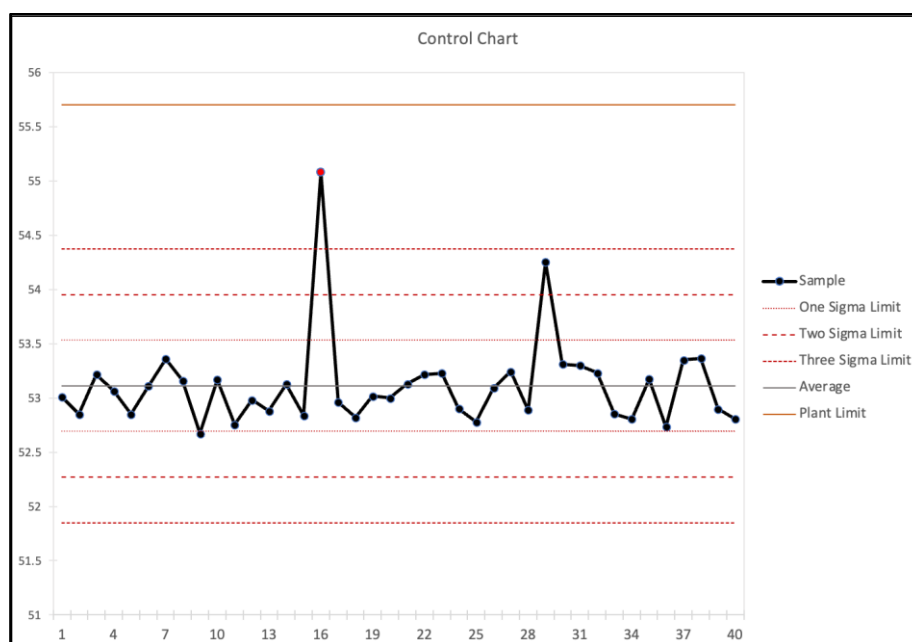
Business Recommendation Report: Dye me red or not

Abstract:

The quantitative and statistical analysis conducted concluded that it would not be appropriate to recall these products. In most cases, dyes turn dark when they exceed a certain threshold value. Although the samples were determined to not exceed the ideal margins and the upper limit, people will have a different reaction to the dye depending on the type of their hair and the products they use. Additionally, recalling products would cost 13.5 million USD, which cannot be afforded since sales are down from forecast.

Recommendation based on Numerical and Statistical Analysis

The analysis was based on stratified random sampling; samples from each stratum (batches of products) were selected based on their proportion to the total number of products stored in the inventory. For a detailed analysis, samples were taken from all batches. In our study, we chose a sample size of 40. Smaller samples will yield unreliable results, whereas larger samples will require more processing time. To finalize the decision, we have to submit the report and recommendations to the global team within 24 hours, also PR and marketing strategies will be based on the decision for Monday's product launch.



Control Chart for different batches of Koleston #54.7

It was stated that the upper limit for Ceteareth-25 in #54.7's color formula was 55.7 milliliters per liter. The analysis was based on a 99% level of confidence, with a confidence interval of 53.08 to 53.14. This is close to the ideal proportion of chemicals in a red dye. Based on the comparison between the upper control limits and the results of the analysis, we recommend not recalling the products since the chemicals do not exceed or reach the threshold levels. Infusion and dosage machines should be calibrated regularly and quality control procedures should be changed. This should ensure that samples always fall within the ideal margins since there are samples within the upper limits but over ideal configurations.

To acknowledge the complaints filed by customers, the company should provide free sample-sized sachets in stores after Monday's launch. Customers can test the dye on a small strand of hair and decide if they want to buy the full-sized product based on the results. Results may vary according to the individual, so we must emphasize on the disclaimer. There would also be benefit to include a color card showing the various red color dyes, ranging from bright red to dark brown.

Based on a regression analysis conducted by the Competitive Intelligence Manager, the Rebelde campaign is expected to drive red, black, and blue dye sales (Escamilla, 2015). The dyes should be promoted aggressively emphasizing shade, durability, and even feature characters showing you how to copy them.

The analysis and recommendation are backed by a case study where e-cigarettes were found to be malfunctioning and as a result created explosions causing severe injuries to customers and other people near them. Rather than ordering e-cigarette companies to pull their products, the FDA advised customers to take precautions when charging them, as well as take other measures to prevent battery overheating (Azad, 2019). There will always be defects in a business. However, that doesn't mean that defective products should always be recalled. Therefore, a recall is not warranted. In our case because the products have not been proven to be harmful to customers nevertheless, the resulting color will be different for each customer depending on their hair structure. Given that the recall results in a loss of both money and product, the decision is not to do it.

References:

Azad, A. (2019, June 20). *This teen's vape exploded, shattering his jaw*. CNN. Retrieved

November 17, 2022, from <https://www.cnn.com/2019/06/19/health/e-cigarette-vape-explode-teen-study>

CNN. (2016, December 22). *E-cigarette explosions raise safety concerns* [Video]. Youtube.

https://www.youtube.com/watch?v=dTr_h6be7ig

Luis Escamilla. (2015, January 28). *Roberta and Lupita Dye their Hair with Garnier*

Products [Video]. YouTube. <https://www.youtube.com/watch?v=9b02QA4jCBU>

Products, C. for T. (n.d.). *Tips to help avoid "vape" Battery Explosions*. U.S. Food and Drug

Administration. Retrieved November 17, 2022, from <https://www.fda.gov/tobacco-products/products-ingredients-components/tips-help-avoid-vape-battery-or-fire-explosions>