Harvard Undergraduate Data Analytics Group

[SharkNinja A]

SharkNinja specializes in small household appliances in 24 different countries. They have two major brands: Shark, which specializes in vacuums, hair dryers, and fans, and Ninja, which specializes in appliances like grills, coffee makers, and blenders. SharkNinja's business model focuses on providing high-quality household products while continuously expanding into new markets and channels of distribution.

Project Description: This SharkNinja Case is involved with the Strategic Sales and Analytics Team (note: weekly meetings/deliverables with the client).

A few high-level goals outlined (but not limited to) are:

1. **What is the impact of Club and QVC/HSN major deals on the rest of trade?**
    1. SharkNinja moves a lot of volume in a short period of time via clubs (ie Costco) or home shopping (QVC or HSN). This must have an impact on the rest of the trade (WMT, Target, etc). What is it? How long does it last? Are we simply just pulling sales forward at a lower margin?
    2. Create modeling to help SharkNinja find the end "answer" or "answers," allowing them to reuse the model later.
2. **Are retailers gaming our UPP (unilateral price policy)?**
    1. SharkNinja sets a price floor on its products, and via their UPP, if a retailer chooses to price the product below the given floor, we stop shipping them.
    2. Depending on how much inventory a retailer is carrying, this stopped shipment can be meaningful (the retailer will lose sales) or it can be inconsequential (they have enough inventory to last them through the stop shipment).
    3. Are there clear patterns by each retailer on how they are ordering and pricing, allowing them to "game" this?
    4. Propose possible changes or order fulfillment or their UPP enforcement to discourage behavior.
3. **How can we get smarter with the consumption modeling of our Ninja Thirsti?**
    1. Our Ninja Thirsti utilizes CO2 cylinders and Flavor pods, requiring a consumer to replenish both.
    2. Possible areas to explore:
        i. How do we forecast this demand?
        ii. Are consumers "dropping out" ie they bought the product, used it some, but now aren't replenishing it?
        iii. How frequently are consumers replenishing?
        iv. Regional differences?

Much of this project will change and adapt in direct partnership with the SharkNinja team as the project develops. Commitment to weekly meetings and weekly deliverable deadlines with the client will be essential.

Internal Partners: VP of Strategic Sales and Analytics

Datasets: Internal SharkNinja data

Coding Languages: Python, R, Excel, etc.

Specific Skills

- Data visualization and dashboarding

Expected Technical Difficulty: **Easy/Medium**

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[SharkNinja B]

SharkNinja specializes in small household appliances in 24 different countries. They have two major brands: Shark, which specializes in vacuums, hair dryers, and fans, and Ninja, which specializes in appliances like grills, coffee makers, and blenders. SharkNinja's business model focuses on providing high-quality household products while continuously expanding into new markets and channels of distribution.

Project Description: This SharkNinja Case is involved with the Operations Team (note: weekly meetings/deliverables with the client).

A few high-level goals outlined (but not limited to) are:

1. **Customer Service Call Reduction**

SharkNinja receives millions of customer service inquiries per year, which can be a painful process for its customers.

1. Analyze customer service inquiry cases and phone data to provide insights on actions SharkNinja can take to reduce a customer's need to call or contact SharkNinja. The target is to reduce phone calls by 1/3.
2. Unpack data that is housed in an "all other" bucket so that clear insight can be determined and actions defined.
3. Propose ways to look at the data differently going forward to drive more meaningful insights. This may include proposing new analytics dashboards.
4. Meet weekly to align on the next steps based on learnings through the initiative.

2. **Pressure test call forecasting model to determine accuracy. Propose changes to the model.**
    1. Target call abandonment rate < 3% (call answer rate > 97%)

Much of this project will change and adapt in direct partnership with the SharkNinja team as the project develops. Commitment to weekly meetings and weekly deliverable deadlines with the client will be essential.

Internal Partners: COO of Strategic Sales and Analytics Team

Datasets: Internal SharkNinja data

Coding Languages: Python, R, Excel, etc.

Specific Skills

- Data visualization and dashboarding

Expected Technical Difficulty: **Easy/Medium**