Hertog Jan Market Entry

# Executive Summary

Anhauser-Bush InBev is a leading multinational brewing company with roughly 25% of market share across the globe. They are considering launching the Dutch premium beer brand Hertog Jan in the US market and want to study the viability of this decision. We recommend they first conduct a taste test to determine appeal to the general American public and a pricing study to determine whether the market supports the tier and pricing Anhauser-Bush InBev plans to pursue for this product. Upon successful completion of these two experiments, we recommend a full factorial between-subjects true experiment with blocking by gender to find the most attractive packaging and advertising. Afterwards, the best performing profiles should be studied within a controlled test market to understand own-price elasticities and cross-price elasticities with other brands within Anhauser-Bush InBev's product portfolio (cannibalization) and with competitors' brands (competition).

# Business Context

Anhauser-Bush InBev (ABIA) is a leading multinational beverage and brewing company with roughly 25 percent market share worldwide. Their portfolio ranged from global brands, including Budweiser and Corona, to local brands, such as Harbin and Jupiler. Currently, they are looking to expand their presence in the US market with their Dutch premium beer, Hertog Jan, and they need to validate that this is good decision. If they decide to enter the market, ABIA still has to determine how they want to position Hertog Jan. Their goal is to maximize adoption of the brand Hertog Jan in the new market.

# Exploratory Research

We assume that ABIA intends to import the beer as is. In this case, a preliminary taste test will help determine traction in the American market. We recommend a simple random sample unless ABIA has prior research suggesting different variances in sales across market segments (such as gender and ethnicity), in which case a disproportionate stratified sample will give more reliable results. ABIA should also determine an appropriate price range. This also requires determining the tier in which they ABIA wishes to position this product. This will create a more robust test market experiment, explained below. ABIA may also wish to study container effects: bottles versus cans, six-packs versus eighteen-packs.

# Experimental Design

Upon success of the taste test, we recommend a two-stage design: a lab experiment for internal validity and a test market experiment for external validity. The lab experiment will allow us to determine the combination of attributes that perform best. The test market will allow us to understand cannibalization and competition effects as well as promotion and advertising effects.

We have two potential options to test: We can either design labels or advertising. We recommend doing both. We want to know what to highlight in our advertising and on our packaging. ABIA might have prior information on this, in which case they may prefer to study one over the other.

## True Experiments

We want to measure the effects of benefits, brand associations, brand translation, and gender. The benefits we are interested are tastiness, healthiness, and both. The brand associations we are interested in are those with Europe, the Netherlands, and neither. We also want to know the effects of translating the name to English as opposed to leaving it in the original Dutch. Lastly, we want to see how gender (male versus female) interacts with these effects. All of these are categorical effects we can choose to play up or down in our advertising and packaging. Our dependent variable is willingness to buy, measured by subjects' yes or no response.

We recommend a between-subjects full factorial design. Subjects are first blocked by gender and then randomly assigned to one of eighteen beer profiles described in the appendix. We must control for gender by blocking because we cannot randomly assign it. AB may also wish to construct stratified samples within gender blocks based on other important customer characteristics. We suggest setting up eighteen rooms at the same time with each of the profiles and measure willingness to buy (yes or no). The full factorial design allows us to keep as much information as possible; because we only have eighteen profiles after blocking by gender, the full design is not particularly onerous. This particular design will control for the following extraneous effects that will affect a within-subject design across eighteen beers:   
- History: Time of day, day of the week, and weather affect beer preferences.  
- Maturation: People become tired and bored during long experiments.  
- Main Testing: People's perception of one profile may affect that of another.  
- Selection Bias: AB may stratify samples based on other important characteristics such as propensity to drink.

## Test Market

Our true experiment will allow us to determine the best-performing profile. However, we must also test real world performance: While potential customers have said they will buy, we need to know if they follow through and actually buy. Most importantly, we want to know how this beer performs against our competitors' offerings and how it cannibalizes our own offerings.

We recommend a controlled test market such as those provided by Nielson. We want to track sales across our portfolio and our competitors as much as we can. We also want to track our prices and their prices as well as any concurrent promotions and advertising. This design will allow us to measure cross-price elasticities and own-price elasticities as well as promotion and advertising elasticities. Cross-price elasticities within our portfolio measure cannibalization: We should focus on Becks and Stella Artois, brands about which ABIA is particularly concerned. On the other hand, cross-price elasticities with our competitors' products measures the competitiveness of this brand against our competitors’ offerings.

## Cost Saving Options

Our recommendations above are contingent on budget. The following options are more economical. First, AB can choose to test either packaging or advertising, depending on which they expect to have a greater effect on sales or a greater return on investment. While advertising may have a stronger effect, it is also more expensive. Instead of the full factorial design, we could do a fractional factorial design with nine profiles per gender. Blocking by gender will double this to 18 groups. A third measure would be to spread out testing across different times and days, but this would require also controlling for history effects.

# Potential Risks

Although our proposed experiments all try to control for extraneous variables, certain threats to internal and external validity are difficult to eliminate. The most salient threat to internal validity, our ability to replicate, is the between-subjects design we propose. The eighteen groups undergoing different treatments are still essentially *different* groups. ABIA must take into account that discrepancies in the response by treatment may be the result of underlying group differences, which can be minimized with larger samples. The most salient threat to external validity is the extent to which controlled test markets translate to real world scenarios. The US consists of several disparate markets that vary greatly from one another. For example, New York City has an entirely different culture than Chicago, and even in the Midwest, Chicago is a completely different market from a small town like Columbus, Ohio. Given this complexity, controlled test marketing may not accurately represent the behaviors of the US.

# Recommendations

In conclusion, we recommend ABIA first conduct exploratory research as to whether this beer's taste appeals to the general American public, as to what price level and product tier is appropriate, and as to what container is most appropriate. Afterwards, a between-subjects full factorial design will help determine the best-performing profile (which may differ between advertising and packaging). This part ensures internal validity. To ensure external validity, we use a controlled test market to measure cross-price elasticities, own-price elasticities, and promotion and advertising elasticities. We would also suggest ABIA consider whether they want to maximize adoption for this particular beer or maximize profit across their entire product portfolio.

# Appendix

***Recommended Full Factorial Design***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| *Females* |  |  |  | *Males* |  |  |
| Benefits | Associations | Names |  | Benefits | Associations | Names |
| Tasty | European | Translated |  | Tasty | European | Translated |
| Healthy | European | Translated |  | Healthy | European | Translated |
| Both | European | Translated |  | Both | European | Translated |
| Tasty | Dutch | Translated |  | Tasty | Dutch | Translated |
| Healthy | Dutch | Translated |  | Healthy | Dutch | Translated |
| Both | Dutch | Translated |  | Both | Dutch | Translated |
| Tasty | No Association | Translated |  | Tasty | No Association | Translated |
| Healthy | No Association | Translated |  | Healthy | No Association | Translated |
| Both | No Association | Translated |  | Both | No Association | Translated |
| Tasty | European | Original |  | Tasty | European | Original |
| Healthy | European | Original |  | Healthy | European | Original |
| Both | European | Original |  | Both | European | Original |
| Tasty | Dutch | Original |  | Tasty | Dutch | Original |
| Healthy | Dutch | Original |  | Healthy | Dutch | Original |
| Both | Dutch | Original |  | Both | Dutch | Original |
| Tasty | No Association | Original |  | Tasty | No Association | Original |
| Healthy | No Association | Original |  | Healthy | No Association | Original |
| Both | No Association | Original |  | Both | No Association | Original |

***Optimal Eighteen-Profile Fractional Factorial Design***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| *Females* |  |  |  | *Males* |  |  |
| Benefits | Associations | Names |  | Benefits | Associations | Names |
| Tasty | European | Translated |  | Healthy | European | Translated |
| Healthy | European | Translated |  | Tasty | Dutch | Translated |
| Healthy | Dutch | Translated |  | Both | No Association | Translated |
| Both | Dutch | Translated |  | Tasty | European | Original |
| Tasty | No Association | Translated |  | Both | European | Original |
| Both | No Association | Translated |  | Healthy | Dutch | Original |
| Both | European | Original |  | Both | Dutch | Original |
| Tasty | Dutch | Original |  | Tasty | No Association | Original |
| Healthy | No Association | Original |  | Healthy | No Association | Original |