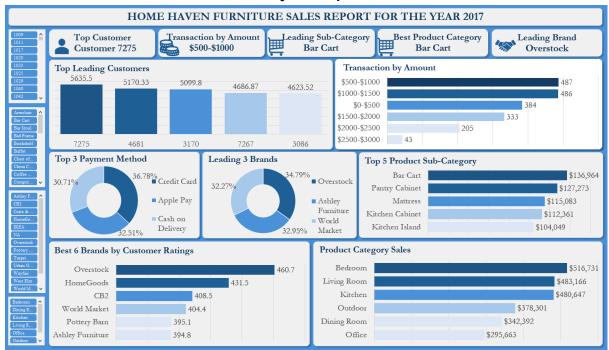
## Home Haven Furniture Store Sales Analytics Report.



Home Haven Sales Report, 2017.

#### Introduction:

The furniture industry is a dynamic and ever-evolving market, with consumers increasingly seeking stylish, functional, and affordable furniture for their homes. In today's growing world, furniture plays a key role in shaping our living and working spaces, thereby driving demand for high-quality products. Home Haven is known for offering a wide range of stylish and quality furniture pieces. With a commitment to quality and customer satisfaction, Home Haven Furniture remains a trusted name in the industry.

#### Objectives:

- 1) To determine the product category that generates the highest total amount of sales revenue.
- 2) To identify the customer who has spent the most on products.
- 3) To gain insights into customer preferences, needs, and develop strategies that will help improve customer satisfaction and loyalty.

#### Methodology:

The dataset used for this project is a furniture dataset. The data was gotten from <a href="kaggle.com">kaggle.com</a> and analyzed using Microsoft Excel. Having highlighted the key variables in the dataset, analysis was carried out by merging the variables in a pivot table.

#### Story of Data:

This project is linked to the Furniture Retail Industry; it shows sales of different kinds of furniture and it consists of 1,938 rows and 14 columns.

The key variables of this data are -Product category, Brand, Product sub-category, Customer Id, Payment method, Assembly cost, Total Amount and Product Price. These variables will

help to understand customer behaviour, preferences and purchasing patterns which will help businesses make informed decisions.

## Data Splitting and Preprocessing:

## - Data Cleaning

The dataset was obtained from <u>kaggle.com</u> and imported into an Excel Workbook where it underwent checks for blanks and duplicates, with a currency symbol appended to the price column. In order to preserve the original dataset, the raw data was duplicated and retained for future reference.

## - Data Splitting

## Independent

- Product Category
- Product Sub-Category
- Brand
- Customer Id
- Payment Method

#### Dependent

- Product Price
- Shipping Cost
- Assembly Cost
- Total Amount

#### Industry context and Stakeholders

This project is part of the Furniture Retail Industry and Its stakeholders are the Store owner, Customer service team and Sales persons.

## Relationship between Variables

- 1. Best performing product category by total amount generated.
- 2. Top 3 leading brands
- 3. Top product sub-category by total amount generated.
- 4. Transaction by Amount.
- 5. Best customer by total amount of product purchased.
- 6. Most used payment type by total amount of products paid for.
- 7. Top Brand by customer ratings.

#### Pre-Analysis Insights:

- 1. To identify the best performing product and develop tactics to maintain its performance to ensure customer retention and loyalty.
- 2. To recognize the top 3 brands and design methods to sustain their success.
- 3. To detect the best performing sub-product and develop frameworks or strategies to sustain its edge.
- 4. To determine the best customer and provide exclusive offers such as special deals or to further increase patronage.
- 5. To identify the most used payment type and devise plans to ensure its stability.
- 6. To identify the top brand by customer ratings and birth tactics to sustain its position.

## In-Analysis Observations and Recommendations:

## Analysis- Top 5 Leading Customers

#### **Observations**

- Out of the top 5 customers, Customer 7275 ranked the best with a revenue of \$5,635.
- Customer 3086 ranked the least amongst the top 5 customers with a revenue of \$4,624.
- Amongst the top 5 customers, Customer 4681 ranked 2nd with a revenue of \$5,170, Customer 3170 ranked 3rd with a revenue of \$5,100 while Customer 7267 ranked 4th with a revenue of \$4,687.

#### Recommendations

- Promotional freebies should be implemented as a part of a campaign to attract new customers.
- Loyal customers like Customer 7275, 4681 and Customer 3170 should be rewarded with exclusive discounts to encourage other customers.
- Feedbacks should be gathered from the least customers to understand their needs and preferences.
- Customers should be regularly communicated with to understand their evolving needs.

## Analysis- Transaction by Amount

#### **Observations**

- Sales that generated the highest quantity of sales spans through sales between \$500-\$1000 (487).
- Sales that produced the minimum quantity of sales ranges between \$2500-\$3000 (43).
- There was a huge difference in revenue between sales that spanned through \$500-\$2500 and \$2500-\$3000.

#### Recommendations

- Freebies or time-limited discounts should be offered for products ranging between \$2500-\$3000.
- Inventory of goods between \$500-\$1500 should be increased to prevent out-of-stock cases.
- Customer feedback for products ranging between \$2500-\$3000 should be collected.

## Analysis- Top 3 Payment Methods

## **Observations**

- Amongst the top 3 Payment methods, Credit cards ranked the highest with 36.78%.
- Apple Pay ranked 2nd with 32.51% while Cash on Delivery ranked the least (30.71%).

## Recommendations

- User experience for other payment methods should be improved upon.
- Customers should be educated on the benefits of alternative payment methods.
- Customer payment preferences should be understood and followed accordingly.

## Analysis- Leading 3 Brands

#### **Observations**

- Out of 13 different brands, the top 3 are Overstock (34.79%), Ashley furniture (32.95%) and World Market (32.27%).
- Overstock topped the chart with 34.79%.

- Ashley furniture ranked 2nd with 32.95% while World Market ranked the least amongst the top 3 brands with 32.27%.
- A blank was noticed with about 5.21% which tends to be the least % generated from an unknown brand.

#### Recommendations

- Marketing strategies for other brands should be developed and followed through so as to increase revenue generated.
- As an online furniture store, ensure that the website is search engine friendly so as to increase visibility and draw potential customers.
- -Social media platforms should be utilized to showcase products, share customer experiences and build brand awareness.

## Analysis- Top 5 Product Sub-Category

## **Observations**

- Among the top 5 product sub-category, Bar Cart topped the chart, generating a revenue of \$136,964.
- Pantry Cabinet ranked 2nd (\$127,273) while Mattress ranked 3rd (\$115,083).
- Kitchen Island ranked the least amongst the top 5 product sub-category with a revenue of \$104,049

## Recommendations

- Fine tune out why certain sub-categories are popular and identify similar strategies to other sub-categories.
- Competitors pricing of products in the sub-categories should be looked upon and adjusted to fit in so as to increase revenue generated.
- Special deals on underperforming sub-categories should be offered so as to drive sales and increase revenue.
- New products or designs should be added to underperforming product sub-categories to drive sales.

## Analysis- Product Category

## **Observations**

- Out of the 6 Product Categories, Bedroom ranked top, generating a revenue of \$516,731.
- Living Room ranked 2nd with a revenue of \$483,166, Kitchen ranked 3rd (\$480,647), Outdoor ranked 4th (\$378,301), Dining Room ranked 5th (\$342,392) while Office ranked the least with a revenue of \$295,663).
- Living Room and Kitchen has a slight difference in revenue generated with about \$2,519.

## Recommendations

- Campaigns or marketing strategies tailored towards product categories like Office should be developed and monitored so as to increase revenue generated.
- Discounts should be offered to customers who purchase multiple products in different product categories.
- Customer feedback should be collected on different product categories in order to identify areas of improvement.

## Post-Analysis Observations and Recommendations: Analysis- Top 5 Leading Customers Observations

- The best Customer for the Year is Customer 7275, with a revenue of \$5,635. This Customer bought goods worth 2 between \$2000-\$2500, which are Kitchen Cabinet and Mattress under Bedroom and Kitchen Product Category respectively. The best brand by rating according to this customer is Overstock Furniture with a personal rate of 4.6.
- Customer 4681 ranked 2nd amongst the best 5 Customers with \$5170. He bought 1 product worth \$2000-\$2500 and another worth \$2500-\$3000 which are Bedframe and Ottoman under Bedroom and Living Room Product Category respectively. The best brand by his personal rating is not shown (blank) which seems to be an error on his part.
- Customer 3170 ranked 3rd with a revenue of \$5,100. According to his personal rating, the best furniture is CB2 furniture which he rated 4. This customer bought 2 goods worth \$2000-\$2500 which are Coffee table and Pantry Cabinet under Living Room and Kitchen Product Category respectively.
- Customer 7267 ranked 4th with a revenue of \$4687. According to this Customer, Ashley Furniture is the best brand with a personal rating of 4.2. This Customer purchased 1 product worth \$2500-\$300 and another worth \$1500-\$2000 which are Bedframe and Mattress under the Bedroom Product Category.
- Customer 3086 ranked least amongst the top 5 Customers with a revenue of \$4,624. This Customer bought 1 product worth \$1500-\$2000 and another worth \$2500-\$3000 which are Dresser and Kitchen Cabinet under Bedroom and Kitchen Product Category.

#### Recommendations

- All top 5 customers seem to have purchased products under Bedroom and Kitchen Cabinet, therefore goods under these categories should be increased so as to generate more revenue.
- Complementary furnitures should be packaged at discounted prices and advertised to Customers to increase purchase and revenue generated
- New arrival products and freebies should be marketed to customers via Email marketing to increase patronage and revenue.
- Support should be provided to customers when needed so as to build loyalty, patronage and revenue.

# Analysis- Product Category

#### **Observations**

- Amongst the 6 Product categories, Bedroom topped the chart with \$516,731. Amongst customers that purchased a product in this category, the top 5 are Customer 7267 (\$4,687), Customer 7079 (\$3,093), Customer 9117 (\$3,093), Customer 6345 (\$3,090) and Customer 9008 (\$3,041). The top brand for Bedroom Category is Overstock furniture with 37.27%, while Bedroom Categories worth \$2000-\$2500 (60) were the most sold. The most used payment method for this category is Credit card (35.43%). The most sold product under this category is mattress with \$115,803.
- Amongst the 6 Product categories, Living Room ranked 2nd with \$483,166. Amongst customers that purchased a product in this category, the top 5 are Customer 9537 (\$4,599), Customer 9185 (\$3,528), Customer 9561 (\$3,265), Customer 5978 (\$3,218) and Customer 9454 (\$2,861). The top brand for Living Room Category is Overstock furniture with 34.92%, while Categories worth \$2000-\$2500 (75) were the most sold. The most sold

product under this category is Sofa, generating a revenue of \$90,033 and the most used payment method for this category is Credit card (36.13%).

- Kitchen ranked 3rd amongst the 6 Product categories, generating a revenue of \$480,647. The most sold product under this category is Bar Cart with a revenue of \$136,964. Its top 5 Customers are Customer 8692 (\$3,703), Customer 7275 (\$3,278), Customer 4505 (\$2,919), Customer 7418 (\$2,801) and Customer 8460 (\$2,760). Categories worth \$1000-\$1500 (84) were the most sold and its top brand is Ashley furniture with 38.30%.
- Outdoor ranked 4th amongst the 6 Product Categories with a revenue of \$378,301. Amongst customers that purchased a product in this category, the top 5 are Customer 2923 (\$2,987), Customer 1659 (\$2,704), Customer 8381 (\$2,671), Customer 7363 (\$2,553) and Customer 1920 (\$2,051). The top brand for Outdoor Category is Target furniture with 33.86%, while Outdoor Categories worth \$500-\$1000 (100) were the most sold. The most used payment method for this category is Cash on Delivery (34.78%). The most sold product under this category is Garden Chair with \$84,064.
- Dining Room ranked 5th amongst the 6 Product Categories with a revenue of \$342,392. The most sold product under this category is China Cabinet with a revenue of \$77,977. Its top 5 Customers are Customer 9835 (\$3,017), Customer 3695 (\$2,712), Customer 2697 (\$2,673), Customer 4111 (\$2,321) and Customer 1020 (\$2,212). Categories worth \$500-\$1000 (81) were the most sold and its top brand is World Market furniture with 36.27%.
- Office ranked the least amongst the 6 Product Categories, generating a revenue of \$295,663. Amongst customers that purchased a product in this category, the top 5 are Customer 7367 (\$2,311), Customer 2874 (\$2,212), Customer 5668 (\$1,772), Customer 8538 (\$1,707) and Customer 6016 (\$1,707). The top brand for Office Category is HomeGoods furniture with 51.24%, while Office Categories worth \$500-\$1000 (118) were the most sold. The most used payment method for this category is Cash on Delivery (36.64%). The most sold product under this category is Bookshelf with \$70,930.

#### Recommendations

- Campaigns or marketing strategies tailored towards product categories like Office should be developed and monitored so as to increase revenue generated.
- Discounts should be offered to customers who purchase multiple products in different product categories.
- Customer feedback should be collected on different product categories in order to identify areas of improvement.
- Discounts on bundled products like dining sets and living room sets should be offered to bring in larger purchases.

# Analysis- Leading 3 Brands

## **Observations**

- Amongst the top 3 brands, Overstock Furniture topped the chart with 34.79 %. Its top 5 customers are Customer 7275 (\$3,278), Customer 6345 (\$3,090), Customer 3529 (\$2,848), Customer 9261 (\$2,744) and Customer 7204 (\$2,609). By ratings, it ranked 1st position with 460.7, its most used payment method is Credit Card with 36.03% and its best 5 product sub-categories are Sofa (\$15,672), Bar Cart (\$15,467), Mattress (\$14,666), Pantry Cabinet (\$14,410) and Chest of Drawers (\$13,914). In transaction by amount, Overstock furniture worth \$500-\$1000 (44) was the most sold while products worth \$2500-\$3000 (2) were the least sold.

- Amongst the top 3 brands, Ashley Furniture ranked 2nd with 32.95%. Its top 5 customers are Customer 8035 (\$2,892), Customer 5658 (\$2,876), Customer 7267 (\$2,841), Customer 8460 (\$2,760) and Customer 4475 (\$2,725). By ratings, it ranked 6th position with 394.8, its most used payment method is Cash on delivery with 40.06% and its best 5 product sub-categories are Kitchen Island (\$18,692), Bar Cart (\$14,738), Pantry Cabinet (\$11,793), Nightstand (\$11,019) and Mattress (\$10,658). In transaction by amount, Ashley furniture worth \$500-\$1000 (38) was the most sold while products worth \$2500-\$3000 (5) was the least sold.
- Amongst the top 3 brands, World Market Furniture ranked the least with 32.27%. Its top 5 customers are Customer 7266 (\$3,003), Customer 3223 (\$2,797), Customer 5306 (\$2,724), Customer 7770 (\$2,618) and Customer 1526 (\$2,569). By ratings, it ranked 4th position with 404.4, its most used payment method is Google pay with 44.91% and its best 5 product sub-categories are Bar Stool (\$14,003), Coffee Table (\$12,737), Mattress (\$11,158), Dresser (\$10,804) and Sofa (\$10,264). In transaction by amount, World Market furniture worth \$500-\$1000 (41) was the most sold while products worth \$2500-\$3000 (2) were the least sold.
- Amongst the leading 3 brands, products worth \$2500-\$3000 were the least sold.

#### Recommendations

- Customer feedback should be gotten from Customers to understand their needs and preferences.
- Marketing strategies for goods worth \$2500-\$3000 should be developed and monitored so as to increase patronage for these products.
- Social media platforms should be leveraged to showcase customer experiences and build various brand awareness.
- Home decor enthusiasts should be collaborated with to showcase products in real life settings so as to increase patronage of various brands.
- Informative content on furniture care or decorating tips should be created on the store's social media pages to attract customers and engage audiences.

# Analysis- Top 5 Product Sub-Category Observations

- Amongst the top 5 product sub-category, Bar Cart which is under the Kitchen Product Category topped the chart with \$136,964. Amongst customers that purchased a bar cart, the top 5 are Customer 7888 (\$2,665), Customer 7770 (\$2,618), Customer 8206 (\$2,596), Customer 6313 (\$2,569) and Customer 5781 (\$2,556). The top brand for Bar cart is Ashley furniture with 30.72%, while Bar Cart worth \$1000-\$1500 (22) was the most sold.
- Amongst the top 5 product sub-category, Pantry Cabinet which is under the Kitchen Product Category ranked 2nd with \$127,273. Amongst customers that purchased a Pantry Cabinet, the top 5 are Customer 7418 (\$2,801), Customer 8457 (\$2,737), Customer 4817 (\$2,530), Customer 3170 (\$2,528) and Customer 4505 (\$2,471). The top brand for Pantry Cabinet is Crate and Barrel furniture with 35.86%, while Pantry Cabinet worth \$1000-\$1500 (24) was the most sold.
- Amongst the top 5 product sub-category, Mattress which is under the Bedroom Product Category ranked 3rd with \$115,083. Amongst customers that purchased a Mattress, the top 5 are Customer 6345 (\$3,090), Customer 7266 (\$3,003), Customer 1844 (\$2,983), Customer 9193 (\$2,966) and Customer 8033 (\$2,916). The top brand for Mattress is Wayfair Furniture with 38.79%.

- Amongst the top 5 product sub-category, Kitchen Cabinet which is under the Kitchen Product Category ranked 4th with \$112,361. Amongst customers that purchased a Kitchen Cabinet, the top 5 are Customer 7275 (\$3,278), Customer 4329 (\$2,612), Customer 1519 (\$2,591), Customer 5503 (\$2,541) and Customer 3762 (\$2,487). The top brand for Kitchen Cabinet is Target Furniture with 38.69%, while Kitchen Cabinet worth \$500-\$1000 (19) and \$1000-\$1500 (19) were the most sold, with no difference in quantity sold.
- -Amongst the top 5 product sub-category, Kitchen Island which is under the Kitchen Product Category ranked the least position with \$104,049. Amongst customers that purchased a Kitchen Island, the top 5 are Customer 8460 (\$2,760), Customer 5530 (\$2,605), Customer 6062 (\$2,573), Customer 6666 (\$2,497) and Customer 2838 (\$2,481). The top brand for Kitchen Island is Ashley Furniture with 45.68%, while Kitchen Island worth \$1000-\$1500 (19) was the most sold.

#### Recommendations

- Special deals on underperforming sub-categories should be offered to drive sales and increase revenue.
- The inventory of products under the top 5 sub-categories should be increased to prevent out-of-stock cases.
- Complementary products from other sub-categories should be suggested to customers purchasing from popular sub-categories.
- Sub-categories with lesser sales should be focused on with advertising, social media campaigns and influencer partnerships, being an online store.
- Understand and fine tune out why some product sub-categories are popular and apply similar strategies to other sub-categories.

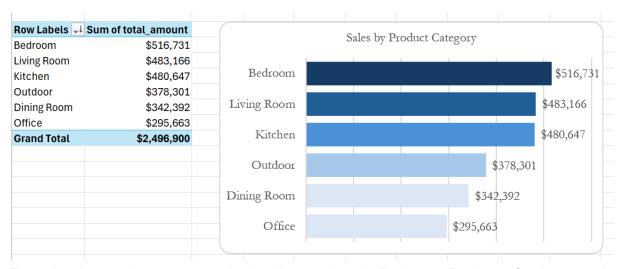
#### Data Visualizations:

- Top Customers: A Column-chart was used
- Transaction by Amount: A Bar-chart was used.
- Top 3 Payment method: A Pie-chart was used.
- Leading 3 Brands: A Pie-chart was used.
- Top 5 Product Sub-categories: A Bar- chart was used.
- Top 6 Brands by Customer ratings: A Bar-chart was used.
- Product Category Sales: A Bar-chart was used.

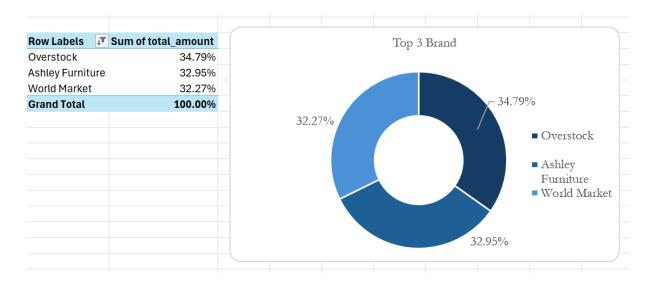
The next step taken for this analysis was to input the data in a pivot table to find the relationship between variables.



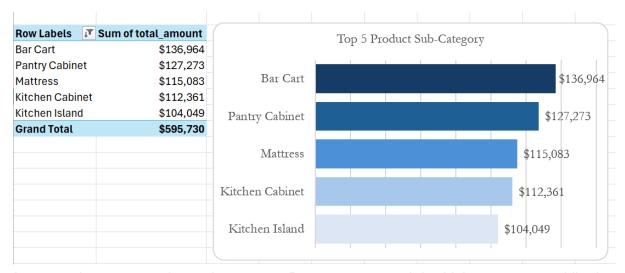
From the Column chart above representing the best 5 customers, Customer 7275 is topping the chart. This customer purchased products worth \$5,635.



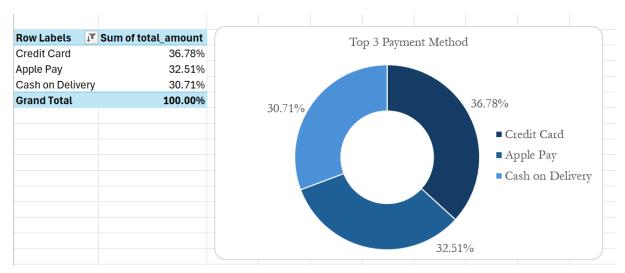
For sales by product category, the leading product is Bedroom. Bedroom furniture worth \$516,731 was purchased.



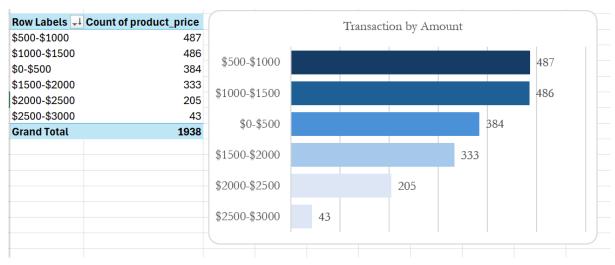
The top 3 brands as seen above are Overstock, Ashley Furniture and World Market, with Overstock being the top brand.



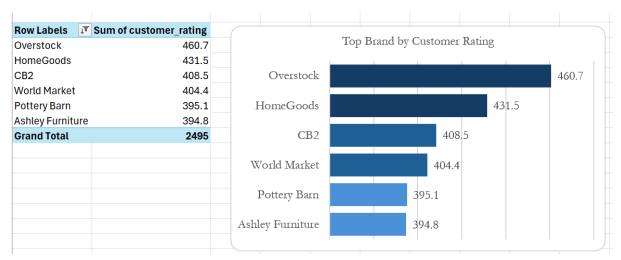
Amongst the top 5 product sub-category, Bar cart generated the highest revenue while the least sold is Kitchen Island.



The top 3 payment methods are Credit card, Apple pay and Cash on delivery. From the chart, customers seem to prefer the Credit card method.



From the chart above, furniture worth \$500-\$1000 was the most purchased while furniture worth \$2500-\$3000 was the least sold.



By customer ratings, Overstock had the highest customer ratings as it also emerged the top brand amongst other brands.

#### Conclusion:

This sales analysis project provides actionable insights to drive strategic decisions and drive business growth for Home Haven Furniture. The findings from this analysis will help Home Haven Furniture improve sales strategies, enhance customer experience, and increase revenue.

Reference: kaggle.com