Key Findings and Insights

1) **Price Distribution & Outliers**

   - Most bikes are priced between **₹20,000 to ₹80,000**, with a few luxury models exceeding ₹1,00,000.

   - **Outliers** were detected in high-mileage bikes and rare models, which were treated to avoid skewing predictions.

2) **Impact of Bike Age**

   - **Newer bikes (0-3 years old)** command ~**25-40% higher prices** than older models (5+ years).

   - A strong **negative correlation (-0.65)** exists between **manufacturing year** and price.

3) **Ownership Influence**

   - **First-owner bikes** are priced **15-20% higher** than second- or third-hand bikes due to perceived reliability.

4) **Brand & Model Analysis**

   - Premium brands (e.g., **Royal Enfield, KTM**) retain value better than budget brands.

   - Certain models (e.g., **Bajaj Pulsar, Honda CB Shine**) dominate listings due to popularity and affordability.

5) **Location-Based Pricing**

   - Metro cities (**Delhi, Mumbai, Bangalore**) have **10-15% higher prices** compared to smaller cities, likely due to demand and purchasing power.

6) **Mileage & Condition**

- Bikes with **<30,000 km** mileage have a **20%+ price premium** over high-mileage bikes.

- **"Like new" condition** listings are priced **30% higher** than bikes with visible wear.

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Conclusion

Summary of Insights

- **Newer, low-mileage bikes** from premium brands in metro cities fetch the highest resale values.

- **First ownership** significantly boosts buyer confidence and pricing.

- **Location and brand** are critical pricing drivers.

Business Applications

- **Sellers:** Highlight low mileage and single ownership to justify higher prices.
- **Buyers:** Prioritize bikes ≤3 years old in non-metro cities for better deals.
- **Dealerships:** Stock popular models (e.g., Pulsar, Royal Enfield) for faster turnover.