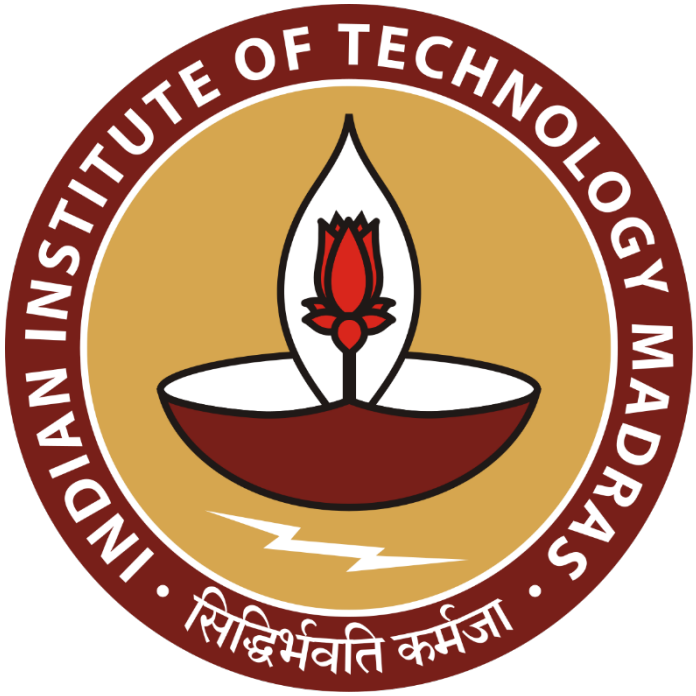
Analytical Study for Automobile Re-Seller

An End-Term report for the BDM capstone Project

Submitted by

Name: Aryan Patil

Roll number: 23f1000968



IITM Online BS Degree Program,

Indian Institute of Technology, Madras, Chennai

Tamil Nadu, India, 600036

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1 Executive Summary

The pre-owned automobile resale sector in India has increasingly transitioned toward organized and formal business practices, driven by customer demand for transparency, structured financing, and reliable documentation. In this context, data-driven decision-making has become essential for automobile re-sellers to manage inventory effectively, understand customer preferences, and improve operational efficiency. This capstone project presents an analytical study of *New My Choice Cars*, a pre-owned automobile dealership located in Pimpri, Pune, operating through Business-to-Consumer (B2C) and Consumer-to-Business (C2B) models.

The study is based entirely on **primary data** collected from physical transaction agreements maintained by the business over a complete business cycle. These manual records were digitized and structured into a spreadsheet-based analytical framework using Microsoft Excel. The dataset captures transaction dates, vehicle specifications, sale values, vehicle types, price segments, and payment modes. Additional derived variables such as month, day of the week, and price bands were created to facilitate time-based and segmentation analysis.

Multiple analytical techniques were applied, including **descriptive statistical analysis**, **monthly sales analysis**, **weekly business cycle analysis**, **vehicle type analysis**, **price band segmentation**, and **payment mode analysis**. The findings indicate that the business predominantly operates in the **premium and luxury price segments**, with SUVs emerging as the most demanded vehicle category. Time-based analysis reveals seasonal variation in sales and a clear concentration of transactions during weekends. Payment mode analysis highlights a strong dependence on bank transfers and loan-based financing.

Overall, this study demonstrates how structured analysis of primary transaction data can support informed decision-making related to inventory planning, staffing alignment, and strategic positioning in the organized pre-owned automobile market.

2 Detailed Explanation of Analysis Process/Method

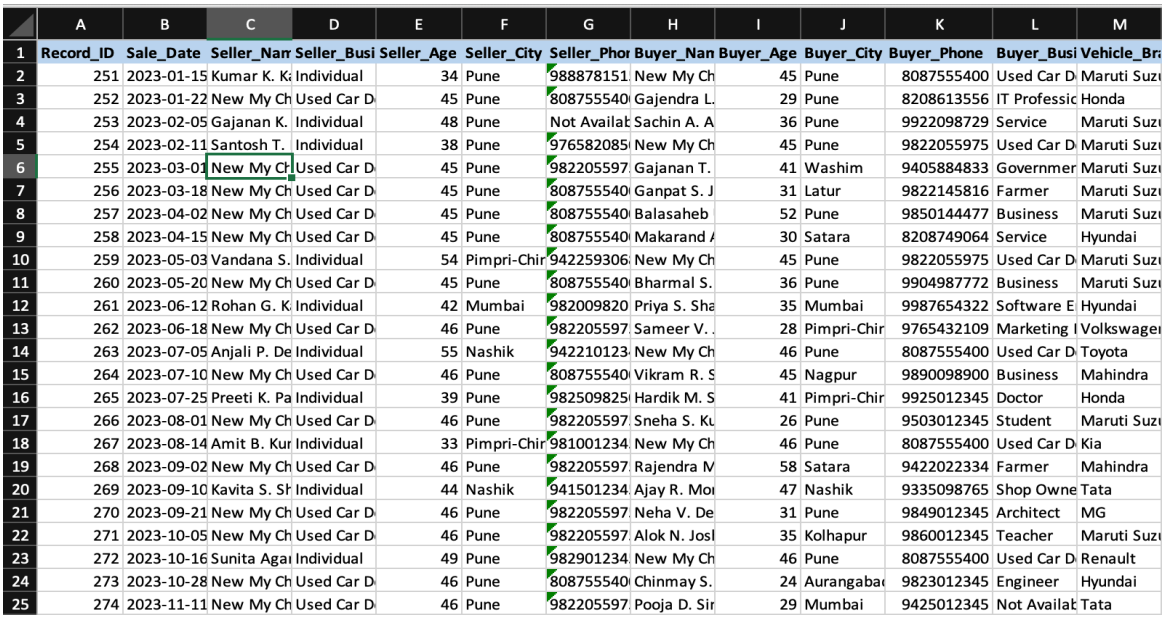
This section provides a comprehensive explanation of the methodology adopted to convert raw primary business records into structured, interpretable insights that support managerial decision-making. The analysis process was intentionally designed to be systematic, transparent, and reproducible, keeping in mind the operational realities of a small-to-medium organized pre-owned automobile resale business. Rather than relying on complex analytical software, the methodology emphasizes clarity, traceability, and practical usability through Microsoft Excel, ensuring that the business can independently continue similar analyses in the future.

The overall process involved five key stages: data collection, data digitization, data cleaning, derivation of analytical variables, and application of targeted analytical techniques. Each stage was executed carefully to preserve the authenticity of primary data while enhancing its analytical value.

2.1. Data Collection Process

The foundation of this study is **primary data** collected directly from *New My Choice Cars*, ensuring originality and compliance with BDM capstone requirements. The data source comprised physical transaction agreements, commonly referred to as *Kararnama* documents, maintained by the business for every completed vehicle sale. These agreements represent legally valid records of transactions and contain reliable information related to both the vehicle and the financial aspects of the sale.

Each document captures essential attributes such as the transaction date, vehicle make and model, vehicle type, year of manufacture, sale value, and mode of payment. Data was collected across a complete business cycle, allowing the study to incorporate variations arising from seasonality, market demand fluctuations, and operational constraints. Collecting data across an extended period ensures that the analysis reflects sustained business behavior rather than short-term anomalies.



	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Record_ID	Sale_Date	Seller_Nam	Seller_Busi	Seller_Age	Seller_City	Seller_Phor	Buyer_Nan	Buyer_Age	Buyer_City	Buyer_Phone	Buyer_Busi	Vehicle_Bra
2	251	2023-01-15	Kumar K. Ka	Individual	34	Pune	988878151	New My Ch	45	Pune	8087555400	Used Car D	Maruti Suzu
3	252	2023-01-22	New My Ch	Used Car D	45	Pune	808755540	Gajendra L.	29	Pune	8208613556	IT Professic	Honda
4	253	2023-02-05	Gajanan K.	Individual	48	Pune	Not Availat	Sachin A. A	36	Pune	9922098729	Service	Maruti Suzu
5	254	2023-02-11	Santosh T.	Individual	38	Pune	976582085	New My Ch	45	Pune	9822055975	Used Car D	Maruti Suzu
6	255	2023-03-01	New My Ch	Used Car D	45	Pune	982205597	Gajanan T.	41	Washim	9405884833	Governmer	Maruti Suzu
7	256	2023-03-18	New My Ch	Used Car D	45	Pune	808755540	Ganpat S. J	31	Latur	9822145816	Farmer	Maruti Suzu
8	257	2023-04-02	New My Ch	Used Car D	45	Pune	808755540	Balasaheb	52	Pune	9850144477	Business	Maruti Suzu
9	258	2023-04-15	New My Ch	Used Car D	45	Pune	808755540	Makarand A	30	Satara	8208749064	Service	Hyundai
10	259	2023-05-03	Vandana S.	Individual	54	Pimpri-Chir	942259306	New My Ch	45	Pune	9822055975	Used Car D	Maruti Suzu
11	260	2023-05-20	New My Ch	Used Car D	45	Pune	808755540	Bharmal S.	36	Pune	9904987772	Business	Maruti Suzu
12	261	2023-06-12	Rohan G. K	Individual	42	Mumbai	982009820	Priya S. Sha	35	Mumbai	9987654322	Software E	Hyundai
13	262	2023-06-18	New My Ch	Used Car D	46	Pune	982205597	Sameer V. .	28	Pimpri-Chir	9765432109	Marketing I	Volkswagen
14	263	2023-07-05	Anjali P. De	Individual	55	Nashik	942210123	New My Ch	46	Pune	8087555400	Used Car D	Toyota
15	264	2023-07-10	New My Ch	Used Car D	46	Pune	808755540	Vikram R. S	45	Nagpur	9890098900	Business	Mahindra
16	265	2023-07-25	Preeti K. Pa	Individual	39	Pune	982509825	Hardik M. S	41	Pimpri-Chir	9925012345	Doctor	Honda
17	266	2023-08-01	New My Ch	Used Car D	46	Pune	982205597	Sneha S. Ku	26	Pune	9503012345	Student	Maruti Suzu
18	267	2023-08-14	Amit B. Kur	Individual	33	Pimpri-Chir	981001234	New My Ch	46	Pune	8087555400	Used Car D	Kia
19	268	2023-09-02	New My Ch	Used Car D	46	Pune	982205597	Rajendra M	58	Satara	9422022334	Farmer	Mahindra
20	269	2023-09-10	Kavita S. Sh	Individual	44	Nashik	941501234	Ajay R. Mor	47	Nashik	9335098765	Shop Owne	Tata
21	270	2023-09-21	New My Ch	Used Car D	46	Pune	982205597	Neha V. De	31	Pune	9849012345	Architect	MG
22	271	2023-10-05	New My Ch	Used Car D	46	Pune	982205597	Alok N. Josl	35	Kolhapur	9860012345	Teacher	Maruti Suzu
23	272	2023-10-16	Sunita Agai	Individual	49	Pune	982901234	New My Ch	46	Pune	8087555400	Used Car D	Renault
24	273	2023-10-28	New My Ch	Used Car D	46	Pune	808755540	Chinmay S.	24	Aurangabad	9823012345	Engineer	Hyundai
25	274	2023-11-11	New My Ch	Used Car D	46	Pune	982205597	Pooja D. Sir	29	Mumbai	9425012345	Not Availat	Tata

Figure 1: Screenshot of the raw data sheet showing manually entered transaction records.

The data collection process involved direct interaction with the business owner and careful manual verification of records to confirm accuracy and completeness. This step was critical in establishing trust in the dataset and ensuring that all subsequent analyses were grounded in authentic business activity. No secondary data sources, such as online repositories or publicly available datasets, were used at any stage, reinforcing the primary nature of the study.

2.2. Data Digitization and Cleaning

Once collected, the physical transaction records were digitized into a structured spreadsheet format to enable computational analysis. Digitization involved manually entering transaction details into Excel while maintaining consistency with the original documents. This step transformed unstructured paper-based information into machine-readable data suitable for aggregation and visualization.

Following digitization, a systematic data-cleaning process was undertaken to improve data quality and analytical reliability. Vehicle brand names and body types were standardized to eliminate inconsistencies caused by spelling variations or shorthand notations. Date fields were converted into a uniform format to support accurate time-based analysis. Sale values were reviewed for outliers and transcription errors to ensure numerical validity.

In cases where entries appeared incomplete or ambiguous, records were cross-checked with original documents and corrected wherever possible. This rigorous cleaning process was essential to prevent distorted results during aggregation and to ensure that observed patterns genuinely reflected business performance rather than data-entry issues.

2.3. Data Structuring and Derived Variables

To enhance analytical depth, the cleaned dataset was further structured through the creation of derived variables. These variables were generated to convert raw transactional attributes into meaningful analytical dimensions aligned with business decision-making needs.

Month	Month_Num	ay_of_Wee	Price_Band
January	1	Sunday	Mid (3-6L)
January	1	Sunday	Mid (3-6L)
February	2	Sunday	Budget (<3L)
February	2	Saturday	emium (6-10
March	3	Wednesday	emium (6-10
March	3	Saturday	Mid (3-6L)
April	4	Sunday	Mid (3-6L)

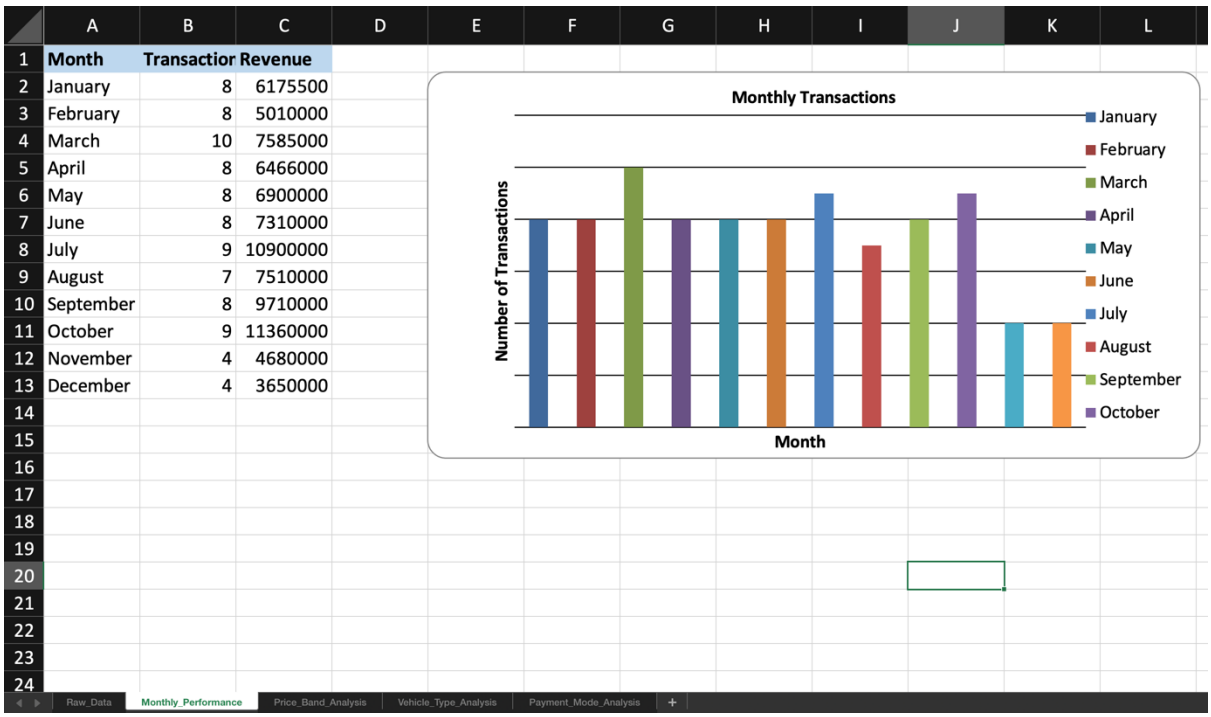
Figure 2: Screenshot highlighting derived columns such as Month, Day, and Price Band.

Time-based variables such as **month** and **day of the week** were extracted from the transaction date to facilitate the study of seasonal trends and weekly business cycles. This enabled the identification of peak sales periods and operational bottlenecks. Additionally, vehicles were categorized into predefined **price bands**—Budget, Mid-range, Premium, and Luxury—based on sale value. This segmentation allowed the analysis to capture customer purchasing capacity and the dealership's market positioning.

The introduction of derived variables played a crucial role in transforming transactional data into insights relevant for inventory planning, staffing decisions, and financial strategy. Without this structuring, the analysis would remain limited to isolated transactions rather than revealing broader patterns.

2.4 Analytical Framework and Tools Used

The analysis was executed using a **multi-sheet Excel-based framework**, where each analytical dimension was explored through dedicated summary tables and visualizations. Aggregation functions were used to compute transaction counts and revenue distributions across months, days, vehicle types, price bands, and payment modes. This modular approach ensured that each analysis remained focused while still being traceable to the original dataset.



Month	Transactior	Revenue
January	8	6175500
February	8	5010000
March	10	7585000
April	8	6466000
May	8	6900000
June	8	7310000
July	9	10900000
August	7	7510000
September	8	9710000
October	9	11360000
November	4	4680000
December	4	3650000

Figure 3: Screenshot of summary tables and charts used for analysis.

Charts were generated to visually represent trends and distributions, allowing patterns to be identified quickly and communicated effectively. Visual representations were intentionally favored over purely numerical outputs, as they enhance interpretability for business stakeholders who may not have formal analytical training.

Microsoft Excel was selected as the primary analytical tool due to its accessibility, flexibility, and widespread adoption in small business environments. Its ability to integrate data storage, processing, visualization, and interpretation within a single platform makes it particularly suitable for operational decision-making in organized yet resource-constrained businesses.

2.5 Rationale for Selected Analyses

The analytical techniques employed in this study were selected based on the specific challenges faced by pre-owned automobile resellers. **Time-based analysis** was conducted to identify seasonal and weekly variations in demand, which directly influence inventory procurement and staffing requirements. **Vehicle type analysis** was used to assess customer preferences and guide sourcing strategies. **Price band analysis** helped evaluate the dealership's market positioning and revenue concentration across affordability segments. **Payment mode analysis** provided insights into customer financial behavior and the extent of reliance on institutional financing.

Together, these analyses ensure that the findings are not only statistically sound but also practically actionable. The chosen methods collectively address key operational, financial, and strategic dimensions of the business, ensuring alignment with real-world decision-making requirements in the pre-owned automobile resale sector.

3 Results and Findings

This section presents the key results derived from the structured analysis of primary transaction data collected from *New My Choice Cars*. The findings are organized across multiple analytical dimensions to ensure clarity and relevance for business decision-making. All tables and figures presented in this section are generated from the Excel-based analytical framework developed as part of this study.

3.1. Monthly Sales Performance Analysis

Monthly sales performance analysis was conducted to examine how transaction volume and revenue generation vary across different months of the business cycle. Understanding monthly patterns is particularly important for pre-owned automobile resellers, as demand is influenced by factors such as festive seasons, financial year timelines, customer income cycles, and vehicle registration considerations. This analysis enables the business to anticipate high-demand periods, prepare inventory in advance, and manage cash flows more effectively during lean months.

The table below presents the monthly distribution of transaction counts and corresponding revenue generated during the observed period.

Month	Transactions	Revenue
January	8	6175500
February	8	5010000
March	10	7585000
April	8	6466000
May	8	6900000
June	8	7310000
July	9	10900000
August	7	7510000
September	8	9710000
October	9	11360000
November	4	4680000
December	4	3650000

Table 1 : Monthly transaction count and total revenue table from Monthly_Performance sheet.

An examination of the data reveals that sales activity is **unevenly distributed across the year**, indicating the presence of clear seasonal trends. Months such as **March, July, and October** stand out as high-performing periods, recording both higher transaction volumes and significantly higher revenue contributions. March, in particular, is a strong month due to financial year-end considerations, where customers often advance purchasing decisions to align with tax planning and budget utilization. Similarly, July and October coincide with periods of increased consumer sentiment driven by monsoon recovery and festive demand, respectively.

October emerges as the strongest revenue-generating month despite having a transaction count comparable to July. This indicates that **average transaction values during October are higher**, suggesting a greater concentration of premium and luxury vehicle sales during this period. Such a pattern highlights the importance of not only tracking transaction volume but also monitoring revenue composition to understand profitability dynamics.

In contrast, **November and December** record the lowest transaction volumes and revenues, each accounting for only four transactions. This decline can be attributed to multiple factors, including customer hesitation to purchase vehicles late in the calendar year, expectations of newer registration years, and possible inventory exhaustion following peak festive sales. This end-of-year slowdown represents a predictable lean phase rather than an anomaly, making it critical for strategic planning.

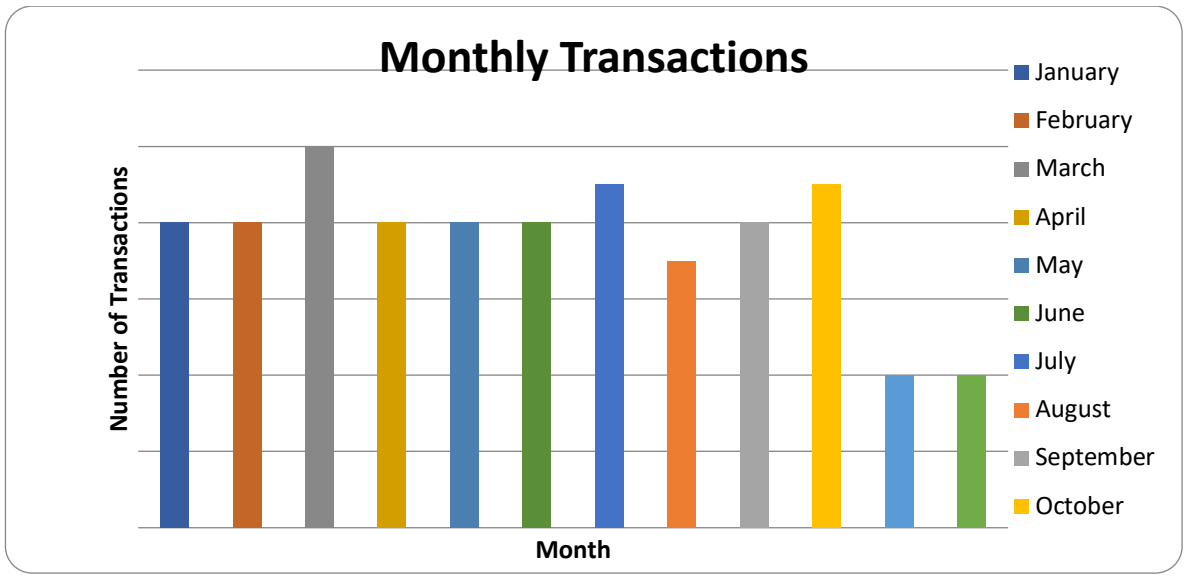


Figure 4: Column chart showing monthly transaction volume from Excel.

From an operational standpoint, these findings underscore the need for **proactive inventory replenishment before peak months** to fully capitalize on heightened demand. Failure to align stock availability with seasonal peaks could result in missed sales opportunities and reduced revenue realization. Conversely, during lean months, cautious procurement and focused marketing strategies can help manage holding costs and maintain liquidity.

Overall, the monthly sales analysis demonstrates that *New My Choice Cars* operates within a clearly defined seasonal demand cycle. Leveraging these insights allows the business to synchronize procurement, marketing, and cash-flow planning with observed demand patterns, thereby improving both operational efficiency and financial stability.

3.2. Weekly Business Cycle Analysis

Weekly business cycle analysis was conducted to understand how transaction activity is distributed across different days of the week and to examine its implications for operational planning. In pre-owned automobile retailing, customer engagement, vehicle evaluation, financing coordination, and documentation are time-intensive processes. Therefore, identifying day-wise transaction patterns is critical for optimizing staffing levels, managing workflow, and ensuring efficient service delivery during peak periods.

The table below presents the distribution of completed transactions across the days of the week.

Day	Transactions
Monday	14
Tuesday	10
Wednesday	9
Thursday	13
Friday	13
Saturday	18
Sunday	14

Table 2 : Day-wise transaction count table from Excel.

The analysis reveals a **distinct concentration of transactions during weekends**, with **Saturday recording the highest activity at 18 transactions**, making it the busiest day of the business week. This peak reflects customer preference for visiting dealerships on non-working

days, when they have greater flexibility for test drives, discussions, and decision-making. Sundays also show relatively high activity with 14 transactions, reinforcing the importance of weekend availability for customer engagement.

Interestingly, **Monday also records a high transaction count of 14**, comparable to Sunday. This pattern suggests that while customer interactions and vehicle selection often occur over the weekend, transaction finalization—including documentation, loan processing, and payment completion—frequently extends into the following working day. This spillover effect highlights the interconnected nature of customer decision cycles across weekends and early weekdays.

Mid-week days such as **Wednesday (9 transactions)** and **Tuesday (10 transactions)** represent the lowest activity levels. These days are typically constrained by customers' work schedules, resulting in fewer walk-ins and delayed purchase decisions. **Thursday and Friday**, with 13 transactions each, show moderate recovery as customers begin planning weekend visits and initiating inquiries.

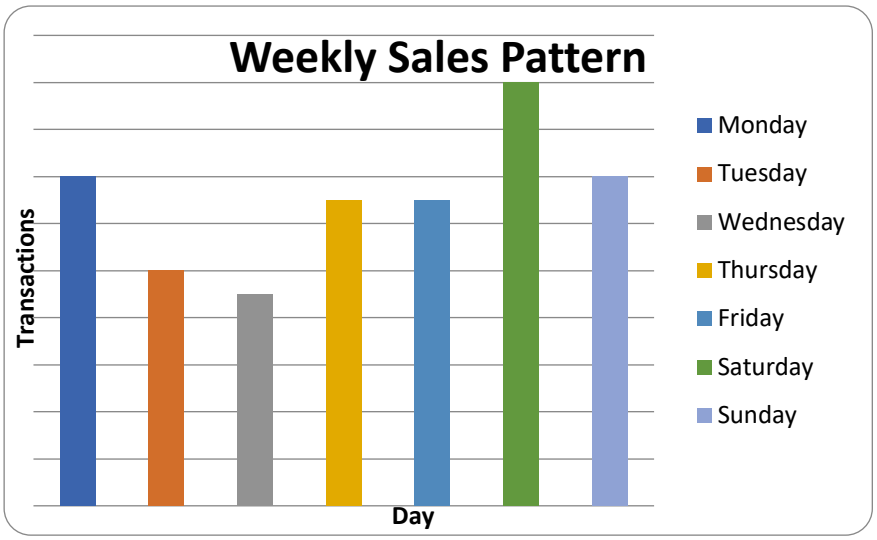


Figure 5: Bar chart showing transactions by day of the week.

From an operational perspective, these findings have significant implications. Peak days—particularly Saturdays—require enhanced staffing for sales consultations, test drives, valuation discussions, and coordination with financial institutions. Insufficient staffing during these periods can lead to longer wait times, rushed interactions, and potential loss of high-value customers. Conversely, lower-activity mid-week days present an opportunity for internal

operations such as vehicle detailing, inventory assessment, procurement planning, and follow-ups with financing partners.

Overall, the weekly business cycle analysis demonstrates that *New My Choice Cars* operates within a predictable demand rhythm. Aligning staffing schedules, documentation workflows, and resource allocation with these day-wise patterns can substantially improve service efficiency, customer satisfaction, and conversion rates.

3.3 Price Band Segmentation Analysis

Price band segmentation analysis was conducted to examine how vehicle sales are distributed across different affordability categories and to understand the purchasing capacity of the dealership's customer base. Vehicles were classified into four price bands—Budget, Mid-range, Premium, and Luxury—based on their final sale values. This segmentation is particularly important in the pre-owned automobile market, as it directly influences inventory procurement decisions, pricing strategy, and profit margins.

The table below presents the transaction distribution across the defined price bands.

Price Band	Transactions
Budget (<3L)	2
Luxury (>10L)	35
Mid (3-6L)	19
Premium (6-10L)	35

Table 3 : Price band-wise transaction distribution table from Price_Band_Analysis.

The analysis reveals a **strong concentration of transactions in the Premium and Luxury segments**, with both categories recording **35 transactions each**. Together, these two segments account for the majority of total sales, clearly indicating that *New My Choice Cars* primarily serves customers with higher purchasing power. These customers are typically less price-sensitive and place greater emphasis on vehicle condition, brand reputation, features, and ownership experience rather than minimum acquisition cost.

The **Mid-range segment**, with **19 transactions**, represents a secondary but stable contributor to sales. This segment often includes customers upgrading from entry-level vehicles or seeking value-for-money options that balance affordability with comfort and performance. While not

as dominant as the Premium and Luxury segments, the Mid-range category provides consistent sales volume and can act as a buffer during periods when high-end demand temporarily softens.

In contrast, the **Budget segment (<₹3 lakh)** records only **two transactions** across the entire dataset. This minimal participation suggests that budget-conscious buyers are not the primary target audience for the dealership. Budget vehicles often attract highly price-sensitive customers and involve thinner margins, longer negotiation cycles, and slower inventory turnover. The low transaction count in this segment confirms that allocating significant resources to budget inventory would yield limited returns.

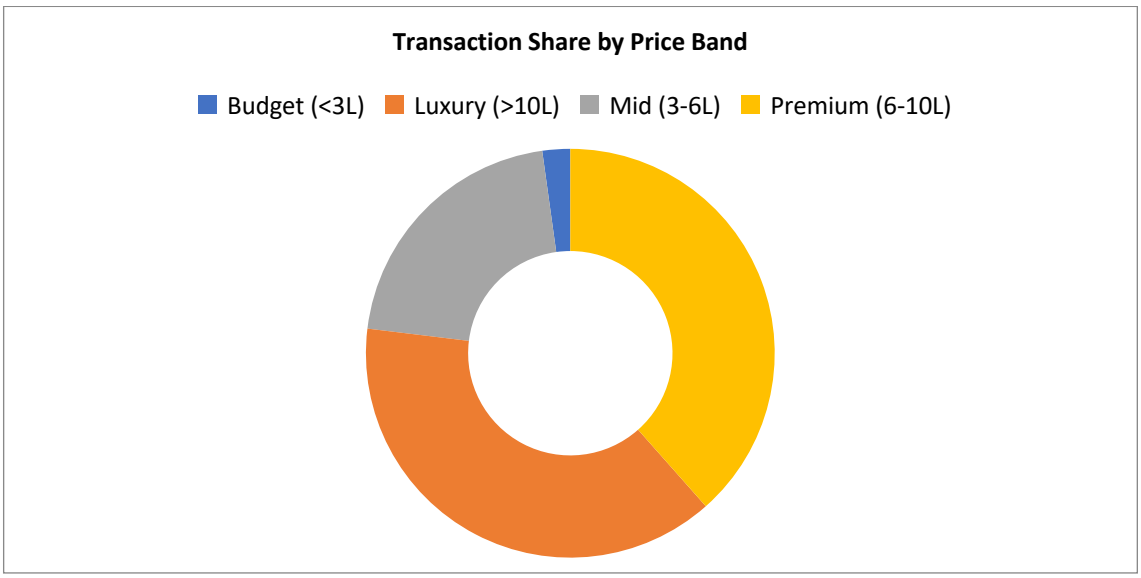


Figure 6: Pie chart showing transaction share by price band.

From a strategic perspective, this price distribution reflects the dealership's deliberate positioning as a **premium-focused pre-owned automobile reseller** rather than a volume-driven dealer competing on low prices. The findings support continued emphasis on sourcing well-maintained, higher-value vehicles that align with customer expectations and deliver better margins. Avoiding excessive capital allocation to low-performing budget inventory can help improve cash flow efficiency and reduce holding costs.

Overall, the price band analysis provides clear evidence that *New My Choice Cars* operates most effectively when it concentrates on premium and luxury offerings, reinforcing a business model centered on quality, value, and customer trust rather than price competition.

3.4. Vehicle Type Analysis

Vehicle type analysis was conducted to understand customer preferences across different body styles, namely Hatchbacks, Sedans, Sport Utility Vehicles (SUVs), and Multi-Utility Vehicles (MUVs). In the pre-owned automobile market, vehicle body type plays a critical role in influencing customer purchase decisions, as it directly affects factors such as comfort, road usability, maintenance expectations, and resale value. Analyzing transaction distribution by vehicle type provides valuable insights for optimizing procurement strategies and showroom inventory composition.

The table below presents the distribution of transactions across different vehicle types.

Vehicle Type	Transactions
Hatchback	21
MUV	5
SUV	46
Sedan	19

Table 4: Vehicle type-wise transaction count table from Vehicle_Type_Analysis.

The results clearly indicate that **SUVs dominate the sales mix**, accounting for **46 out of 91 total transactions**, which represents approximately half of all recorded sales. This strong preference reflects broader shifts in customer behavior toward vehicles that offer higher ground clearance, better road visibility, and suitability for varied road conditions commonly encountered in urban and semi-urban regions such as Pimpri–Pune. SUVs are also perceived as more versatile for family use and long-distance travel, making them a preferred choice among a wide range of buyers.

Hatchbacks, with **21 transactions**, represent a moderate share of sales and typically cater to customers seeking compact vehicles for city commuting. While hatchbacks offer advantages such as ease of driving and lower maintenance costs, their lower transaction value and limited feature sets reduce their appeal among customers targeting premium or aspirational purchases. As a result, hatchbacks contribute to volume but not significantly to overall revenue.

Sedans, accounting for **19 transactions**, demonstrate steady but secondary demand. Sedans are often preferred by customers who value driving comfort and refined aesthetics. However, increasing preference for SUVs has gradually reduced the relative dominance of sedans in the

market. This shift is evident in the transaction distribution, where sedans trail SUVs by a substantial margin.

In contrast, **MUVs**, with only **5 transactions**, exhibit the weakest performance among all vehicle types. This low demand suggests that MUVs cater to a niche customer segment and lack the broad appeal of SUVs or sedans. Procuring such vehicles without confirmed customer interest could lead to longer holding periods and increased capital lock-in.

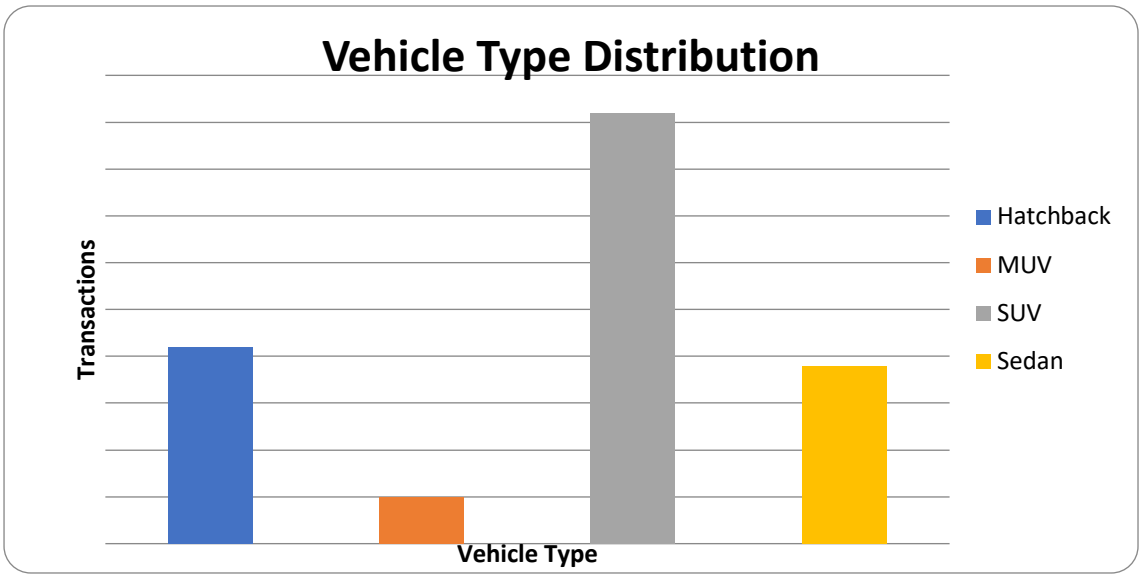


Figure 7: Bar chart showing vehicle type distribution.

From a strategic perspective, these findings strongly support prioritizing **SUV procurement** to maximize inventory turnover and revenue generation. Hatchbacks and sedans should be sourced selectively based on specific customer inquiries, while MUV acquisitions should ideally be demand-driven rather than speculative. Aligning procurement decisions with observed vehicle type preferences can help *New My Choice Cars* minimize inventory risk and strengthen its positioning in high-demand segments.

3.5. Payment Mode and Financing Analysis

Payment mode and financing analysis was conducted to evaluate the financial behavior of customers and to understand the extent of the dealership's dependence on different transaction mechanisms. In the pre-owned automobile resale business, payment modes play a crucial role in determining transaction speed, regulatory compliance, and customer convenience.

Analyzing payment preferences provides insights into customer profiles, risk exposure, and the operational importance of financial intermediaries.

The table below presents the distribution of transactions across various payment modes.

Payment Mode	Transactions
Bank Transfer	35
Cash	7
Cash + Loan	5
Cheque	9
Loan	35

Table 5: Payment mode-wise transaction distribution table from Payment_Mode_Analysis.

The analysis reveals that a **significant majority of transactions are completed through formal financial channels**, with **Bank Transfers and Loans each accounting for 35 transactions**. Together, these two modes constitute a substantial portion of total sales, indicating that customers predominantly prefer structured, traceable, and institution-backed payment mechanisms. This preference is particularly common among salaried professionals and high-income buyers, who rely on formal banking systems for large-value transactions.

Loan-based transactions reflect the critical role of financing in enabling customers to purchase higher-value vehicles, particularly in the Premium and Luxury price segments. The strong presence of loan-financed sales suggests that access to credit significantly expands the effective purchasing power of customers and directly contributes to higher average transaction values. Without efficient loan facilitation, many of these transactions may not have materialized.

Bank Transfers, as a direct and traceable mode of payment, indicate customer trust in formal documentation and regulatory compliance. Such transactions reduce risks associated with cash handling and provide clear financial records for both the business and customers. This mode is especially relevant for high-value transactions where transparency and proof of payment are essential.

In contrast, **Cash transactions**, with only **7 occurrences**, and **Cash + Loan combinations**, with **5 transactions**, represent a relatively small share of total sales. This limited reliance on cash reflects the organized nature of the dealership and its alignment with regulatory norms discouraging large cash dealings. **Cheque-based payments**, accounting for **9 transactions**, serve as a transitional mode, often used by customers awaiting fund clearance or loan disbursement.

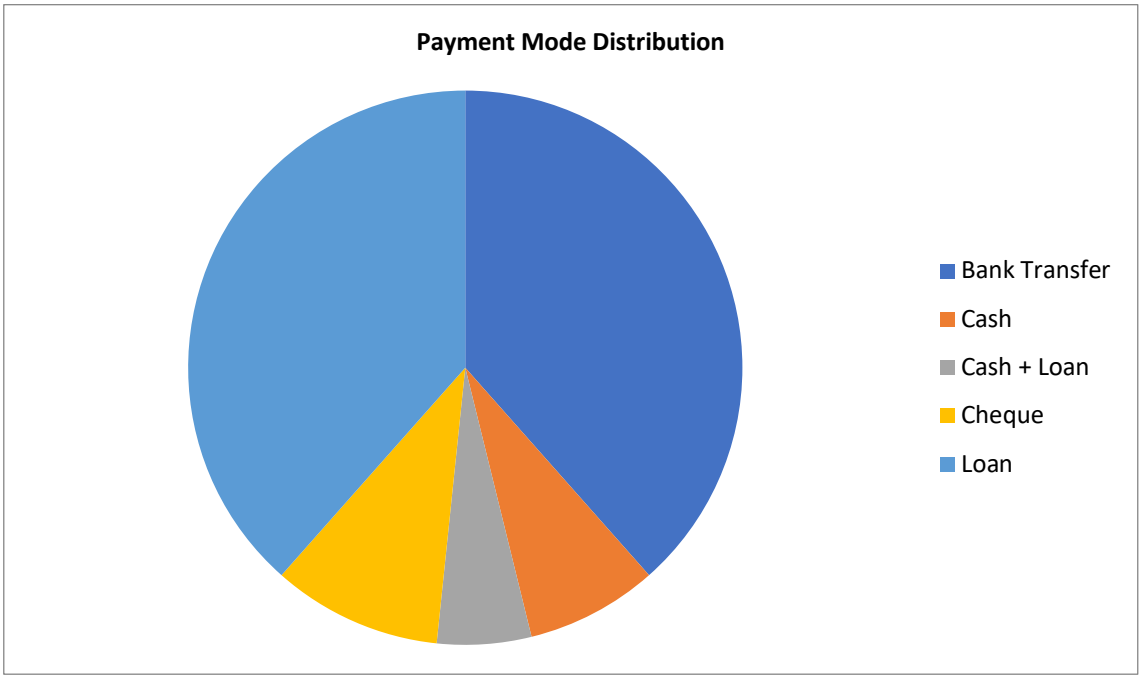


Figure 8 : Pie chart showing payment mode distribution.

From a business perspective, this payment pattern underscores the importance of maintaining strong coordination with banks and financial institutions. Delays in loan approvals or payment processing can directly affect deal closure timelines and customer satisfaction. Efficient financial workflows, clear documentation, and responsive coordination with lenders are therefore essential to sustain sales momentum and minimize transaction friction.

3.6 Consolidated Summary of Key Findings

The consolidated analysis across all dimensions presents a coherent picture of *New My Choice Cars* as a structured, data-driven, and premium-oriented pre-owned automobile reseller. Monthly sales analysis reveals the presence of clear seasonal demand patterns, with identifiable peak and lean periods that influence inventory planning and cash flow management. Weekly

business cycle analysis highlights predictable customer behavior, with transaction activity concentrated during weekends and early weekdays.

Segmentation analyses further indicate that customer demand is strongly skewed toward **SUVs** and **Premium and Luxury price segments**, reinforcing the dealership's positioning away from budget-focused, volume-driven competition. Vehicle type preferences and price band distribution collectively suggest that customers prioritize value, features, and reliability over minimum purchase cost. Payment mode analysis confirms a strong reliance on **institutional financing and formal payment channels**, emphasizing the role of financial partnerships in enabling high-value transactions.

Together, these findings provide a robust, data-backed foundation for informed managerial decision-making. By aligning inventory procurement, staffing schedules, and financial coordination with observed transaction patterns, *New My Choice Cars* can enhance operational efficiency, reduce risk, and strengthen its strategic positioning within the organized pre-owned automobile market.

4 Interpretation of Results and Recommendations

This section synthesizes the quantitative findings derived from the analysis of primary transaction data to generate actionable strategic recommendations for *New My Choice Cars*. Each recommendation presented below is directly anchored in historical transaction patterns observed in the dataset and is framed to support practical decision-making for the dealership. The objective of this section is not only to interpret analytical outcomes but also to translate them into clear managerial actions that enhance operational efficiency, inventory utilization, and long-term business sustainability.

4.1 What the Business Should Continue Doing

The analysis identifies several operational practices that are currently aligned with market demand and are contributing positively to the dealership's performance. These practices should be reinforced and institutionalized to preserve the business's competitive positioning in the Pimpri–Pune pre-owned automobile market.

- Maintain Core Specialization in the SUV Segment

  The Vehicle Type Analysis demonstrates that the SUV category is the dominant contributor to sales volume, accounting for **46 out of 91 total transactions**. This concentration indicates a strong alignment between the dealership's inventory mix and local customer preferences, which increasingly favor vehicles offering higher ground clearance, spacious interiors, and versatility for mixed urban usage. The continued focus on SUVs enables the business to achieve faster inventory turnover and higher average transaction values. Therefore, the dealership should continue prioritizing the sourcing and display of high-demand SUV models, particularly those with proven resale performance, to maintain momentum in this high-growth segment.

- Sustain Focus on Premium and Luxury Price Brackets

  The Price Band Analysis reveals that approximately **77% of total transactions** occur within the **Premium (₹6–10 lakh)** and **Luxury (above ₹10 lakh)** segments, with both categories recording **35 transactions each**. This distribution clearly differentiates *New My Choice Cars* from volume-oriented budget dealers and reflects a deliberate market

positioning toward higher-value customers. Continuing to focus on these price segments allows the business to operate with healthier margins, reduced price sensitivity, and a more stable customer profile. Maintaining this focus is essential for preserving profitability and reinforcing the dealership's premium brand perception.

- Continue Facilitating Bank-Mediated Transactions

  The Payment Mode Analysis indicates that a substantial **77% of transactions** are completed through **Loans and Bank Transfers**, highlighting the importance of formal, traceable payment mechanisms in closing high-value deals. The business's existing capability to coordinate loan approvals, documentation, and bank transfers plays a crucial role in reducing transaction friction for customers. Continuing to support these payment modes not only builds trust among salaried and professional buyers but also ensures regulatory compliance and smoother deal execution.

4.2 What the Business Should Start Doing

While the analysis confirms several strengths, it also highlights opportunities where strategic interventions can further optimize performance and resource utilization.

- Implement a Dynamic Peak-Day Staffing Model

  The Weekly Business Cycle Analysis reveals a pronounced surge in transaction activity during the **Saturday–Monday window**, with **Saturday alone accounting for 18 transactions**, the highest for any single day. This concentration suggests that customer engagement, test drives, and deal finalization predominantly occur during weekends. To fully capitalize on this demand, the dealership should implement a dynamic staffing model that ensures maximum availability of experienced sales personnel and documentation staff during peak days. Such an approach would reduce customer wait times, accelerate deal closures, and improve overall customer experience during high-footfall periods.

- Introduce Strategic Year-End Inventory Liquidation Initiatives

  Monthly Sales Analysis identifies **November and December** as consistently low-performing months, each recording only **four transactions**. This seasonal dip may be

attributed to customer hesitation toward year-end purchases or anticipation of newer vehicle registrations. To mitigate this slowdown, the business should introduce structured year-end clearance initiatives, such as limited-period offers or bundled value-added services, during October. These measures can help smooth cash flows, reduce year-end inventory holding costs, and prevent capital stagnation.

- Formalize Partnerships with Financial Institutions

  Given that nearly **40% of transactions** are loan-financed, formalizing partnerships with selected banks or non-banking financial companies can provide a strategic advantage. Preferred partnerships may enable faster loan processing, standardized documentation workflows, and competitive interest rates for customers. Establishing such relationships can improve mid-week conversion rates by reducing approval delays and strengthening the dealership's value proposition for finance-dependent buyers.

4.3 What the Business Should Avoid

The analysis also highlights areas where continued investment may yield limited returns. Avoiding these areas is essential for protecting working capital and maintaining operational efficiency.

- Avoid Over-Investment in Budget Category Inventory

  The Price Band Analysis shows that the **Budget (<₹3 lakh)** segment contributes only **two transactions** across the entire dataset, indicating minimal demand. Allocating significant procurement capital or showroom space to this segment would result in slower inventory turnover and lower margins. The business should therefore avoid expanding its presence in the budget category and instead concentrate on segments where customer demand and profitability are demonstrably higher.

- Limit High-Cost Marketing During Mid-Week Periods

  Weekly transaction patterns indicate that Wednesdays and Thursdays consistently record lower activity levels compared to weekends. Conducting high-cost promotional campaigns during these periods is unlikely to yield proportional returns. Instead, these days should be reserved for low-cost internal activities such as vehicle refurbishment,

procurement planning, and administrative coordination, ensuring efficient use of resources.

- Reduce General Procurement of MUVs

  Although SUVs show strong performance, **Multi-Utility Vehicles (MUVs)** account for only **five transactions**, reflecting comparatively weak demand. Aggressive procurement of MUVs without confirmed customer interest could lead to capital being locked in slow-moving assets. The business should therefore restrict MUV acquisitions to cases where specific customer demand has been identified in advance.

- Overall Managerial Implication

  Collectively, these recommendations emphasize the importance of reinforcing strengths, addressing operational inefficiencies, and avoiding low-return segments. By aligning inventory strategy, staffing decisions, and financial partnerships with observed transaction data, *New My Choice Cars* can strengthen its market positioning, enhance operational resilience, and support sustainable growth in the organized pre-owned automobile resale sector.

5 Additional Proof of Work

Link: BDM PROJECT FOLDER

Hyperlink -

https://drive.google.com/drive/folders/1XyjGxDCjGBpn3pRFxfUUPJydG_IWgoUL?usp=drive_link