





Understanding the Car Buying Journey

Your guide to the data behind the car buying journey

It Starts with a Spark

- Buying a car is rarely a spontaneous decision. Over 2 weeks to 3 months, most South African car buyers:
 - Visit at least 3 different car websites
 - Shortlist a few vehicles of interest
 - Reach out to multiple dealerships (sometimes unknowingly from the same group)

They may be triggered by:

- A TikTok video, Facebook ad, or YouTube review
- o Hearing a radio promotion
- o Driving past a billboard, or
- Their current car reaching a specific age/milage

Most car buyers then start browsing car websites like:

- Autotrader.co.za
- Cars.co.za
- Motusselect.co.za
- Kia.co.za
- Hyundai.co.za
- Autopedigree.co.za
- Etc



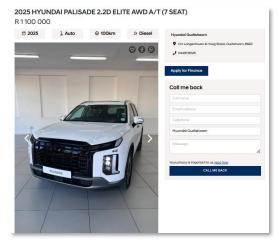


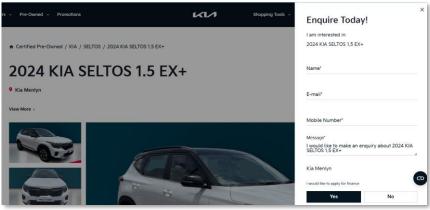


Car buyers in South Africa are unaware which websites are part of which motor group. They will most likely not know that all but the first two websites listed above, are part of Motus — South Africa's largest non-manufacturing automotive group. In turn, Motus dealerships can advertise their cars multiple websites (besides their own) such as Cars.co.za, AutoTrader.co.za and others.

The Car Buyer Submits a Lead

When interest turns into intent, the car buyer often (not always) completes an 'enquiry form' attached to an advertisement, whether it's on social media like facebook, or on a car website. This enquiry form (we call a lead), is linked to a specific car, and asks for:





- Name (sometimes one field sometime two for first name and surname separately)
- Mobile Number
- Email address

All these fields are compulsory. The enquiry is linked to a specific car that is at a specific dealer. The car and dealer are automatically selected and part of







the enquiry. The moment the car buyer submits this form, the record is created, date & time stamped in the **Lead Management System**. This record is referred to as **a lead**.

Lead Management System data fields at this stage of the car buying journey include:

- CustomerID
- LeadID
- DTLeadCreated
- DTLeadAllocated
- Dealer
- LeadType
- LeadSource
- Seek
- InterestMake
- InterestModel
- OBSFullName
- OBSEmail
- Domain
- CellPrefix
- CellPhoneNoLength
- HourOfEnquiry
- DayOfEnquiry

The **Lead Type** and the **Lead Source** fields tell us how the buyer found us and what specific marketing campaign the buyer found the car on. For the purposes of this hackathon, **only Internet Leads are included**. That mean leads such as Walk-Ins are excluded. These two fields are critical context for your model. Your model needs to make a prediction based on these data fields only, since no other data is available at this stage (lead origination stage).







Once a lead is logged:

- The system assigns it to a dealership or call centre (based on the car, location or specific marketing campaign). More than 90% of leads are assigned to dealerships. Call Centre campaigns are small.
- In some instances (during office hours) the Lead Management System triggers the telephony system to auto-dial the car buyer, to connect them with the first available salesperson. Otherwise, a salesperson contacts the lead manually.
- The Date & Time the customer is contacted, is recorded as <u>Date</u>
 Allocated.

From here, the salesperson works with the car buyer — suggesting test drives, sending options, making a trade-in offer on the car buyers' current car or recommending the customer proceed to apply for finance. More than 80% of car purchases, requires finance. The dealership arranges the finance, by submitting it to all the major banks, to obtain finance offers from them, for the car buyer. This process is conducted using the **Finance Process System**. The balance are cash purchases. All cash purchases are also captured on Finance Process System, but will not have any stages relating to the finance approval process.

The Deal Takes Shape

If the buyer proceeds to the finance application stage, the Finance & Insurance Manager at the dealership will submit a finance application on behalf of the car buyer, to all major banks.

Data points captured in the Finance Process System, included in your dataset are:

InFinanceProcessSystem - Application Process Started





Application Submitted



FinanceApplied to Banks

- FinanceApproved At least one bank approved finance terms
- VehicleSold- Car buyer accepted the finance terms from a bank (of purchased cash), and concluded the car purchase.

Cash sales are also recorded in the Finance Process System, as this system also serves as compliance system. If it's a cash sale, no information will be captured in the finance approval process (FinanceApplied & FinanceApproved), only in the final status, namely Vehicle Sold.

For the purposes of this hackathon, no personal identifiable information is available in the dataset.

Why This Matters

Understanding the car buying journey gives you insight into:

- Where intent starts (via lead source)
- When human interaction begins (first actioned)
- How decisions play out (via finance application outcomes)

These stages — from Lead Management System to Finance Process System — form the data spine of your model. You will notice that on average for every 100 leads, 12 leads progress to start the finance application process and 2,6 result in a car sale.

* Your challenge is to decode this journey using data — and predict (at *lead stage!*) the likelihood that the customer will buy!